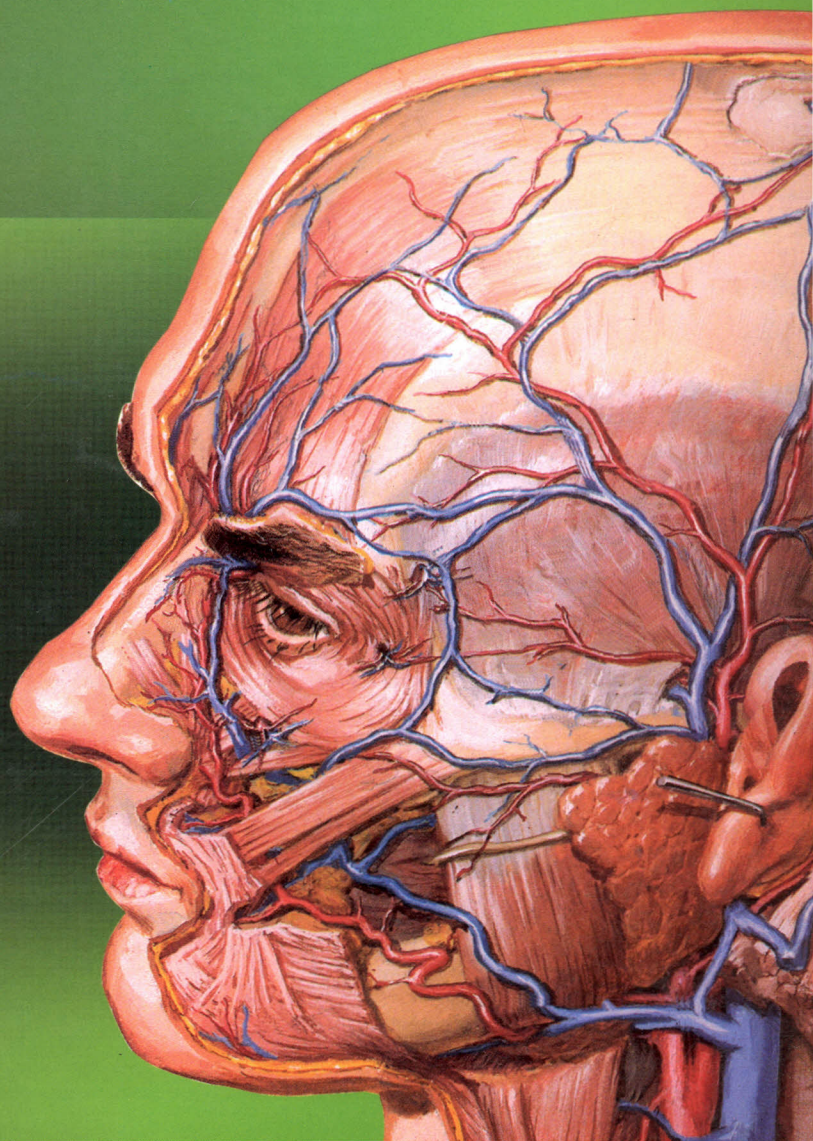


Elfiky's

MINI ATLAS OF
ANATOMY
PART V

HEAD & NECK

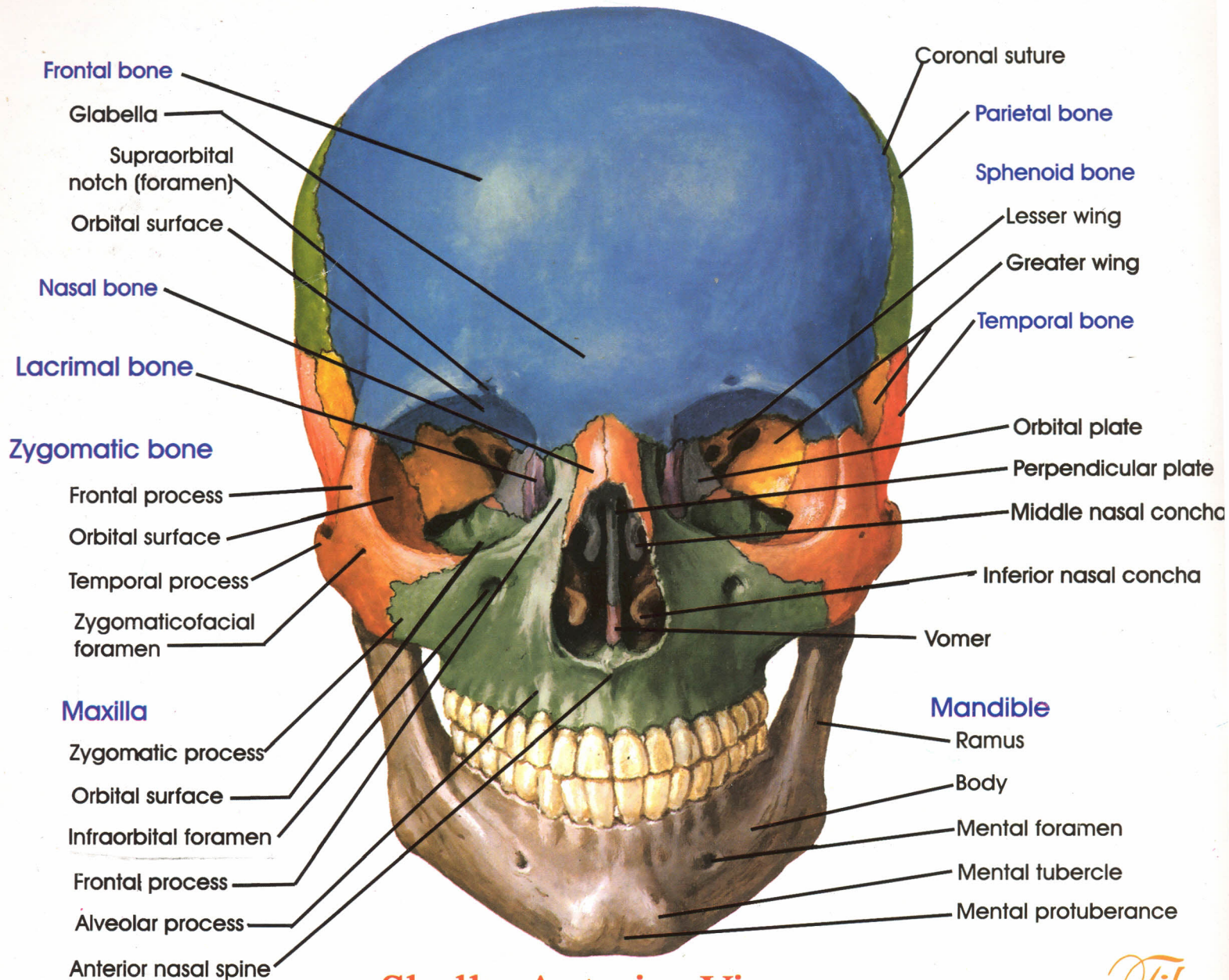


DR. MOHAMED EL-FIKY
Assist.Prof. of Anatomy & Embryology
Faculty of Medicine Menoufia university

EGYPT

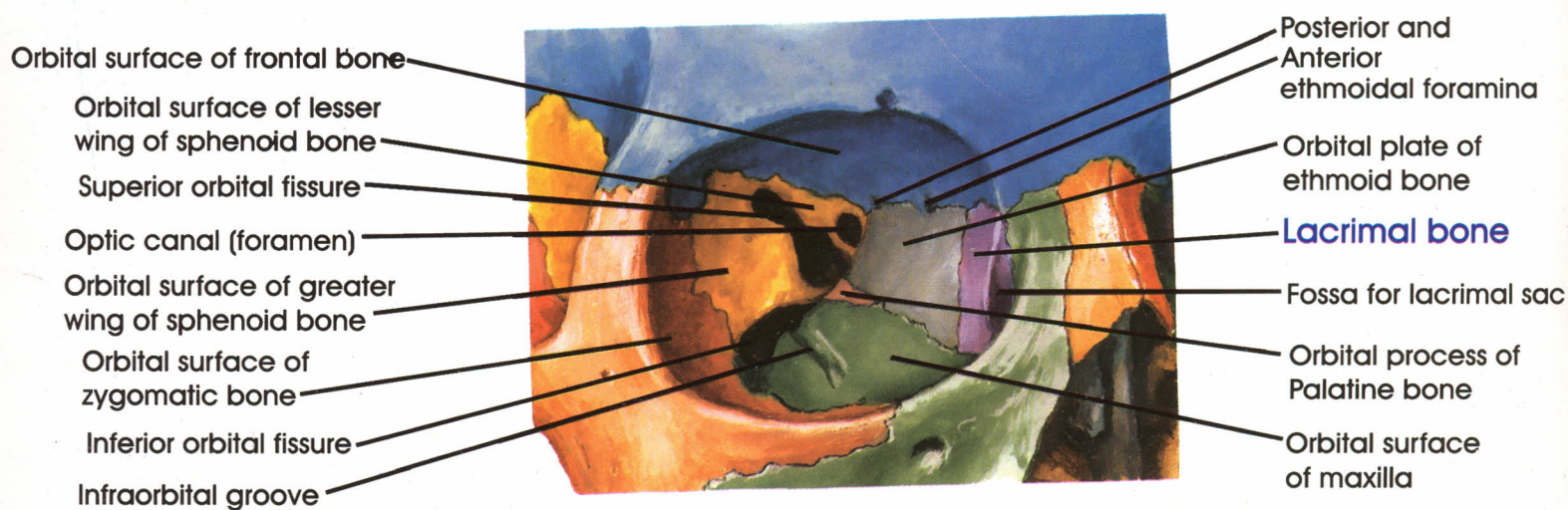
VISIT...

LANZAROTE
Caliente.COM

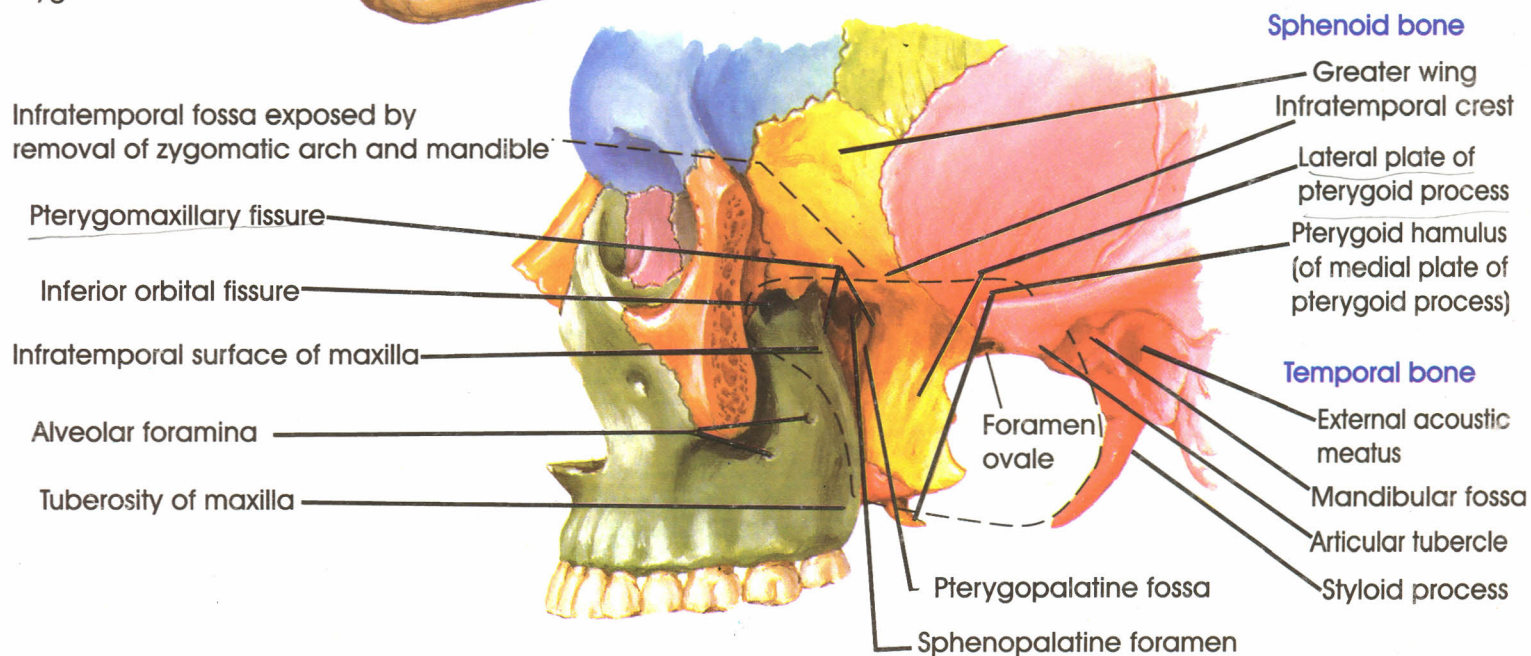
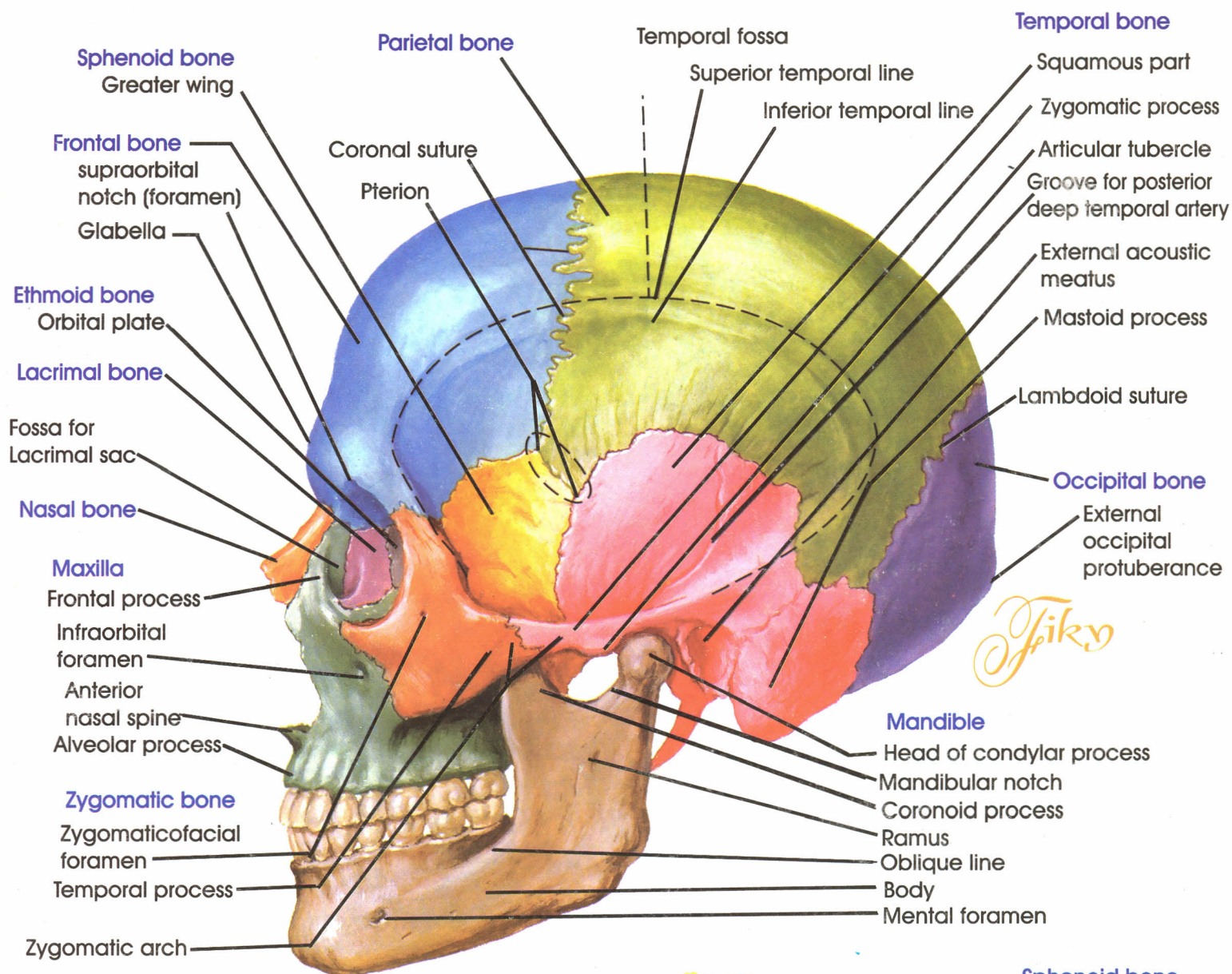


Skull - Anterior View

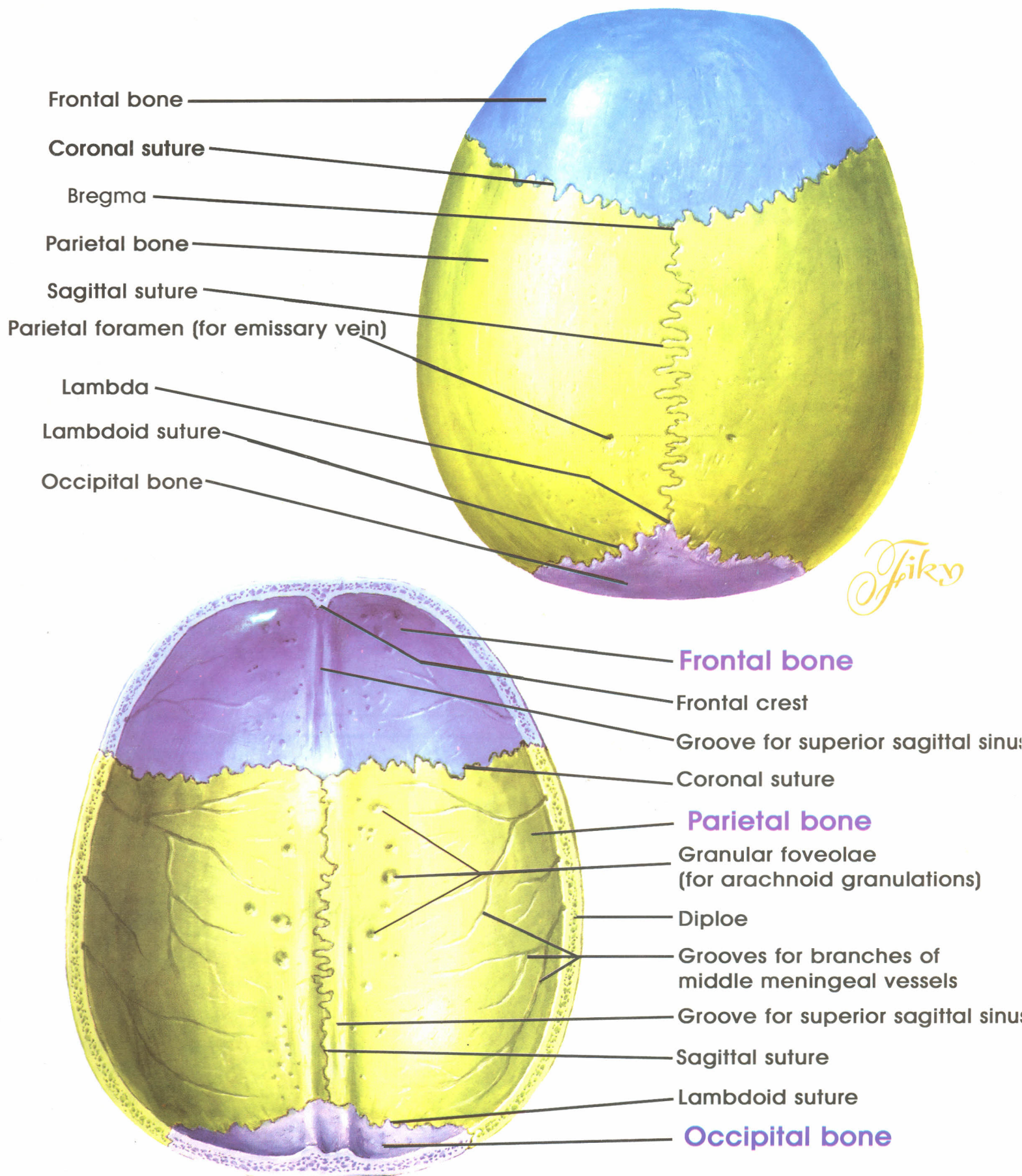
Elfiky



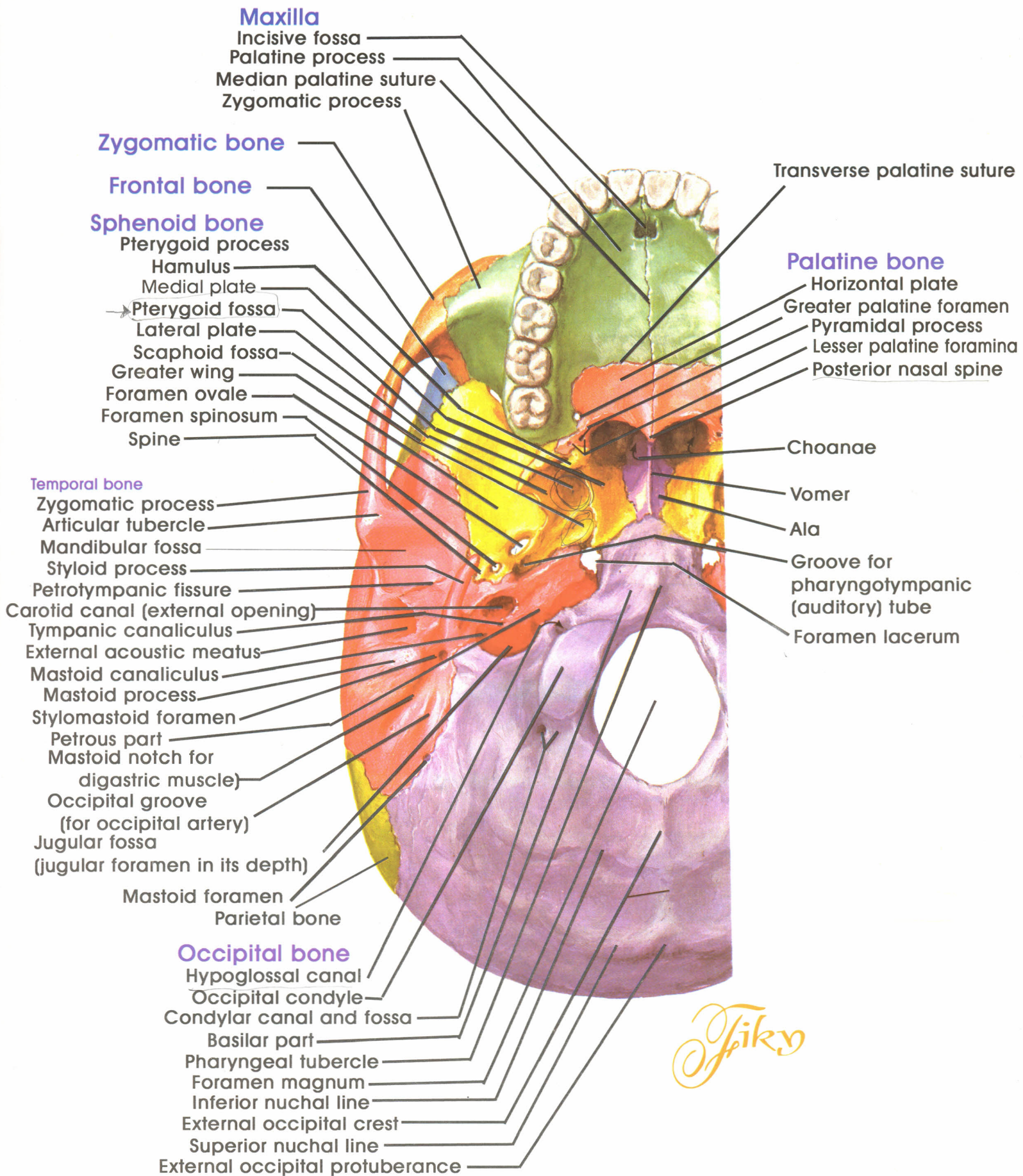
Right Orbit - Frontal and slightly Lateral View



Skull - Lateral View



Calvaria (skull cap)



➤ Cranial base - Inferior View

Frontal bone

Groove for superior sagittal sinus

Frontal crest

Groove for anterior meningeal vessels

Foramen cecum

Superior surface of orbital part

Ethmoid bone

Crista galli

Cribriform plate

Sphenoid bone

Lesser wing

Anterior clinoid process

Greater wing

Groove for middle meningeal
Vessels (frontal branches)

Body

Jugum

Prechiasmatic groove

Sella { Tuberculum sellae

Hypophyseal fossa

turbica { Dorsum sellae

Posterior clinoid process

Carotid groove (for int. carotid a.)

Clivus

Anterior
cranial
fossaMiddle
cranial
fossaPosterior
cranial
fossa**Temporal bone**

Squamous part

Petrous part

Groove for lesser petrosal nerve

Groove for greater petrosal nerve

Arcuate eminence

Trigeminal impression

Groove for superior petrosal sinus

Groove for sigmoid sinus

Parietal boneGroove for middle meningeal
Vessels (parietal branches)

Mastoid angle

Occipital bone

Clivus

Groove for inferior petrosal sinus

Basilar part

Groove for posterior meningeal vessels

Condyle

Groove for transverse sinus

Groove for occipital sinus

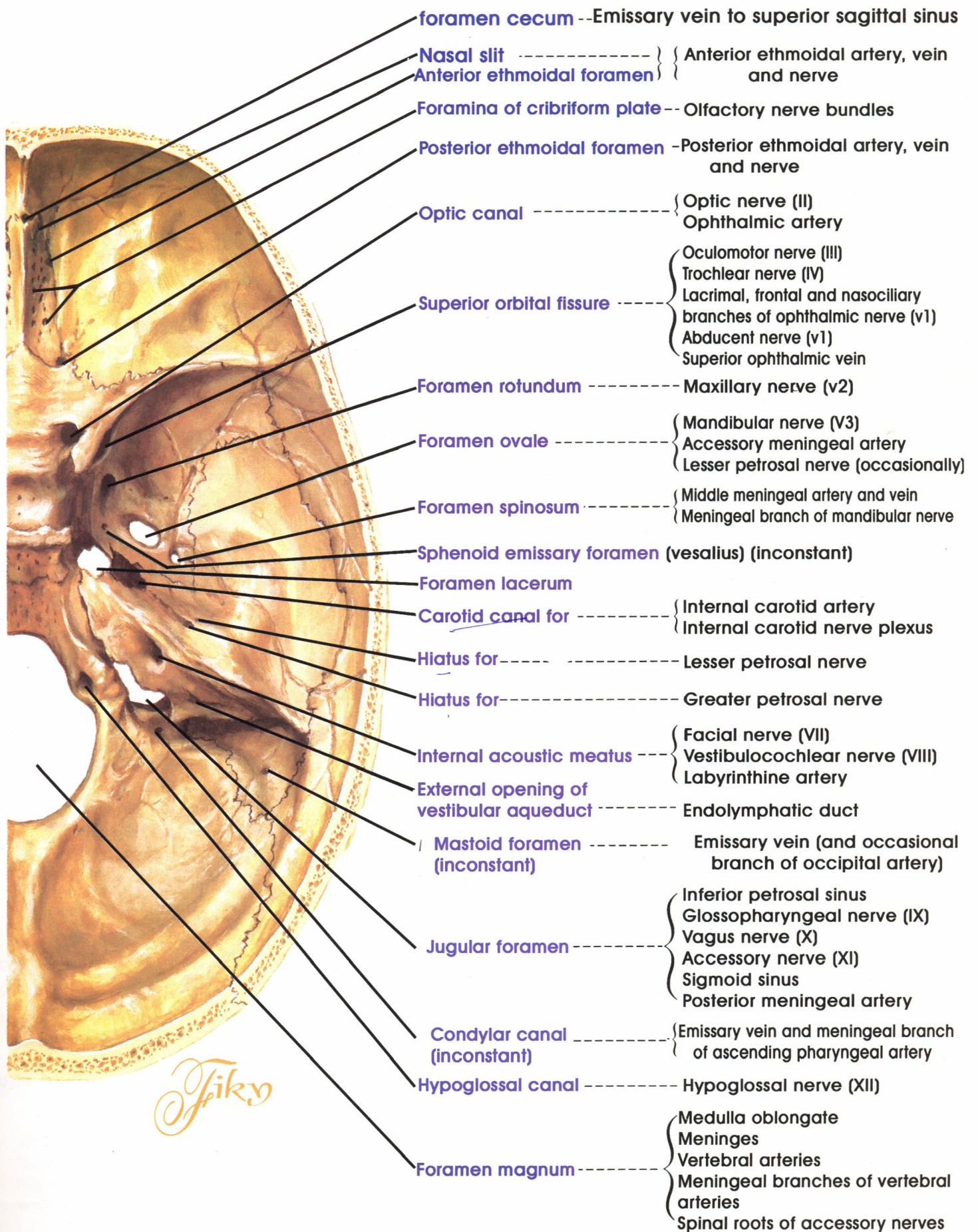
Internal occipital crest

Internal occipital protuberance

Groove for superior sagittal sinus

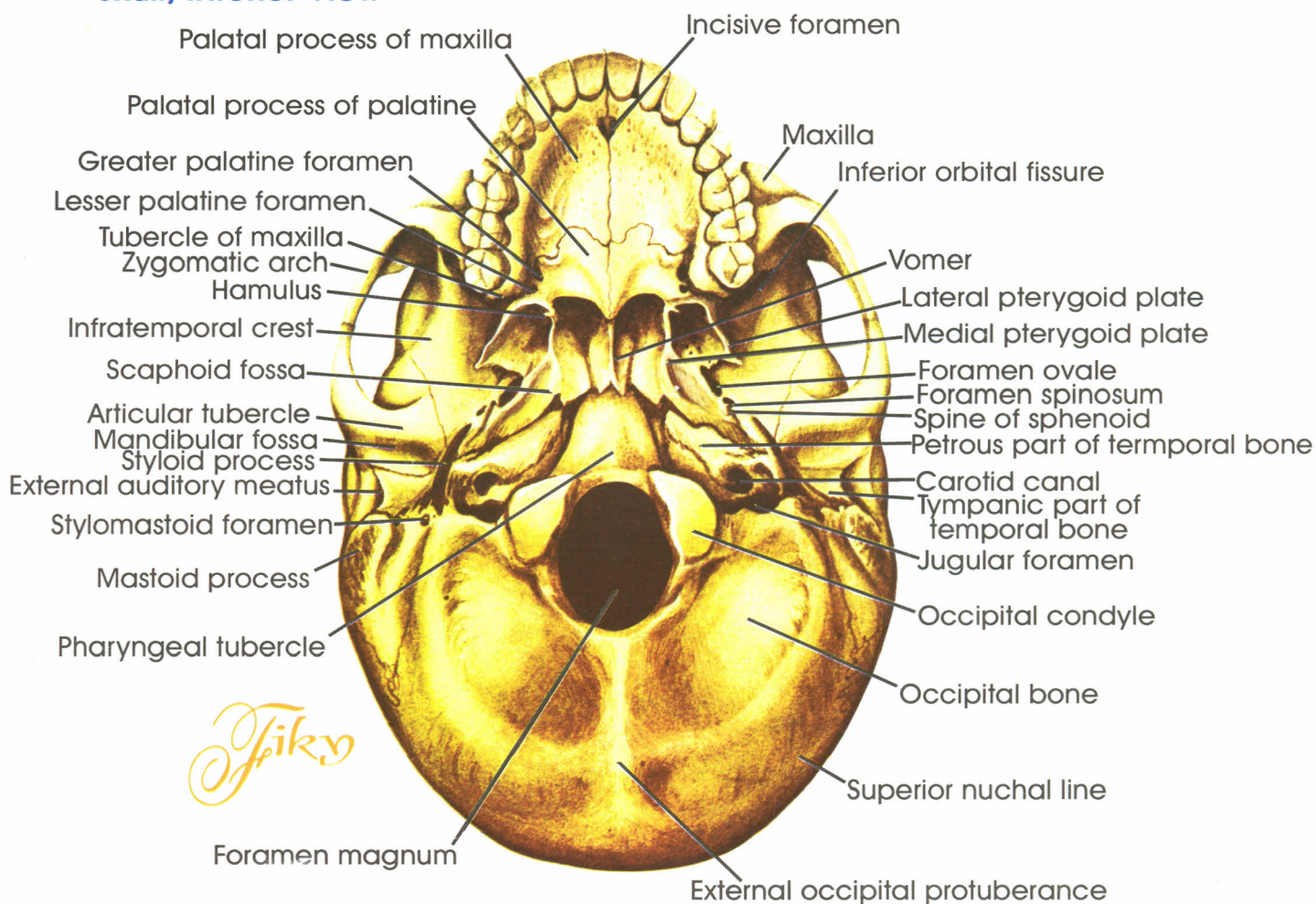
Cranial base - Internal View

Jikky

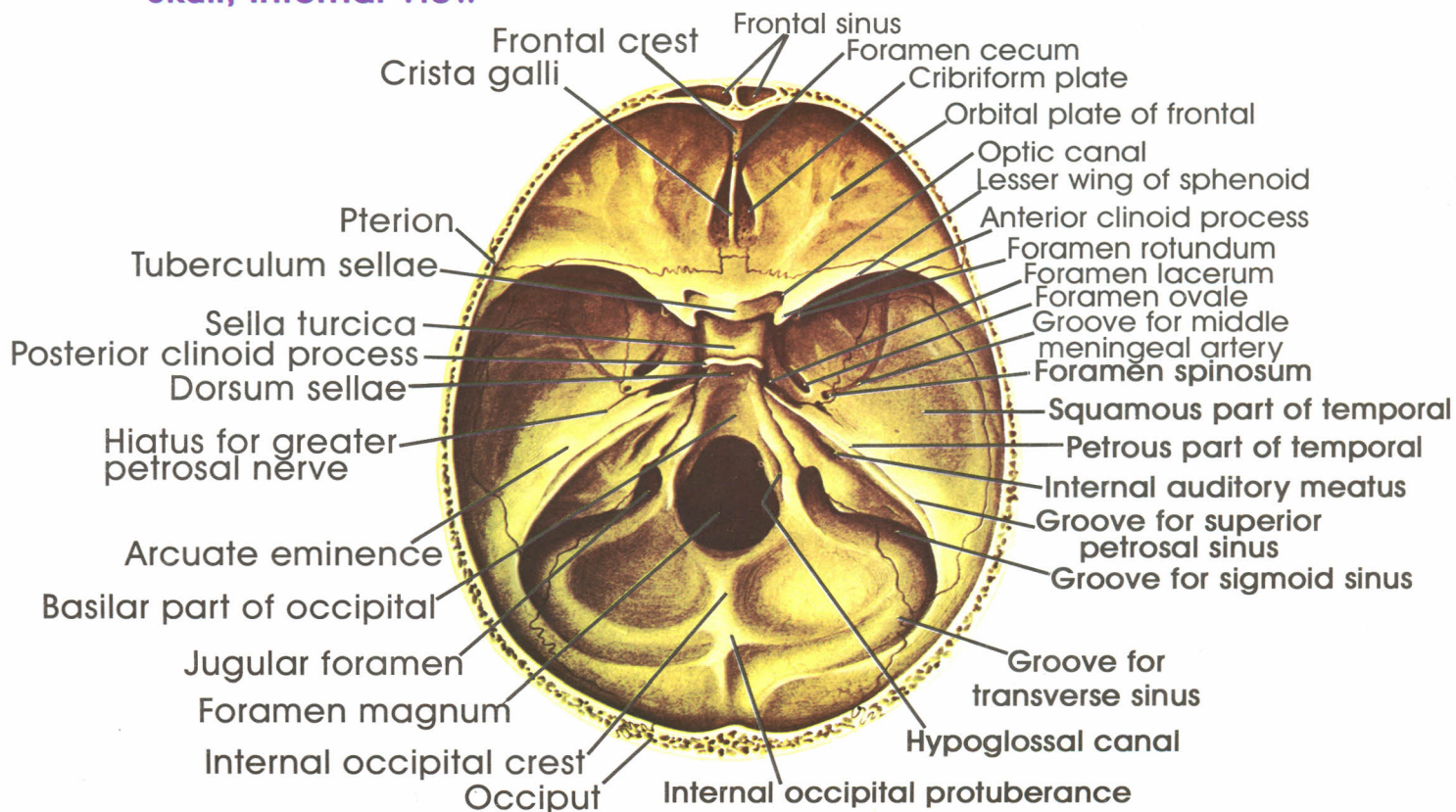


Foramina of Cranial base - Superior View

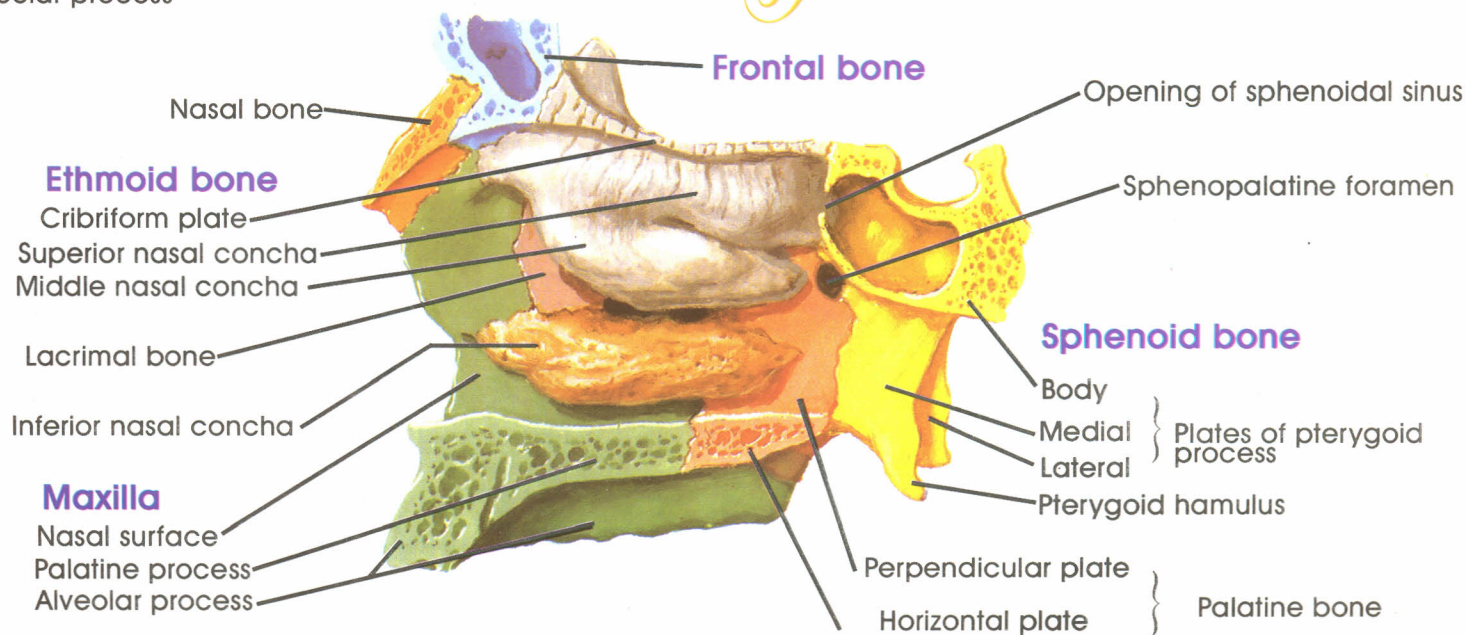
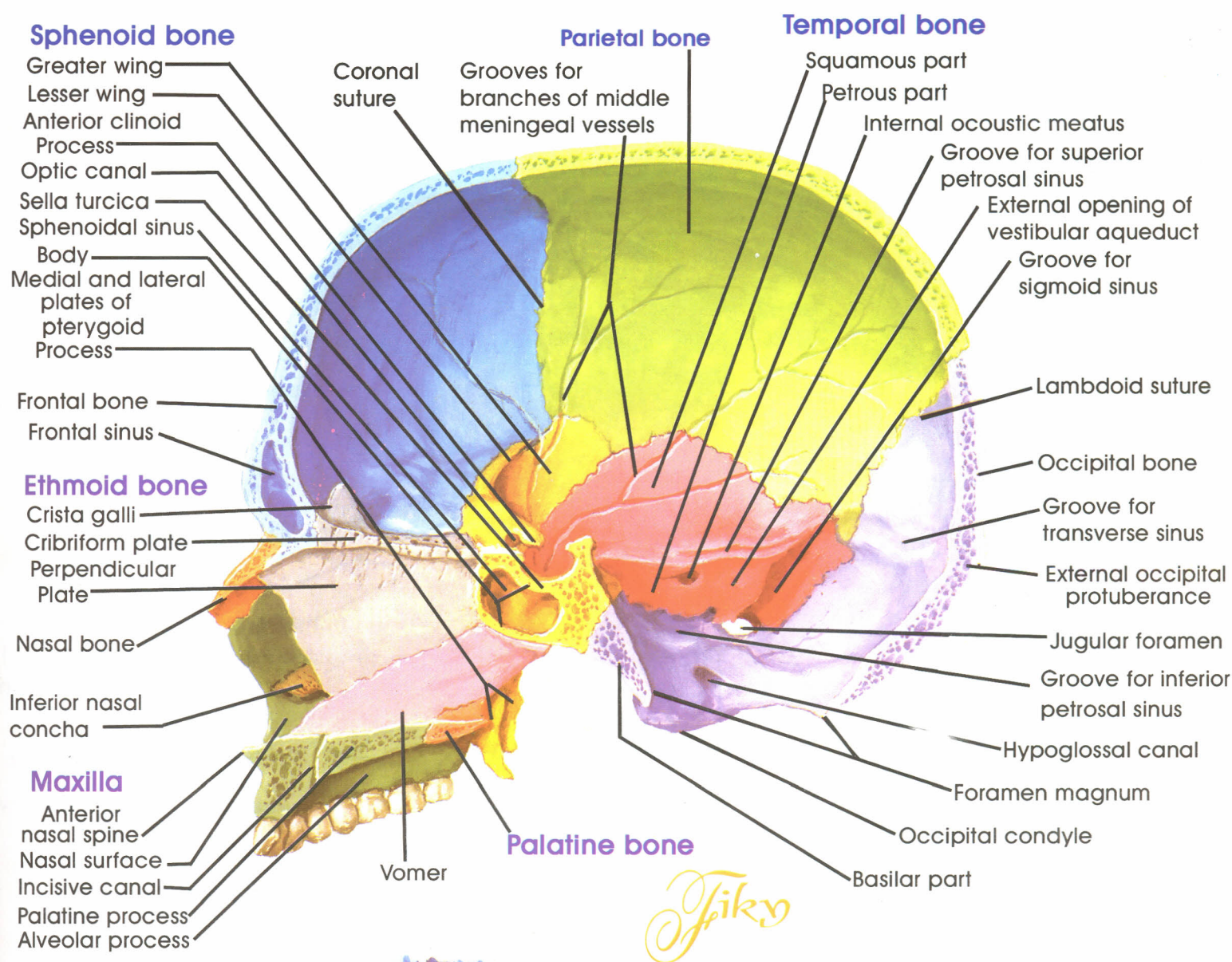
Skull, Inferior View



Skull, Internal View

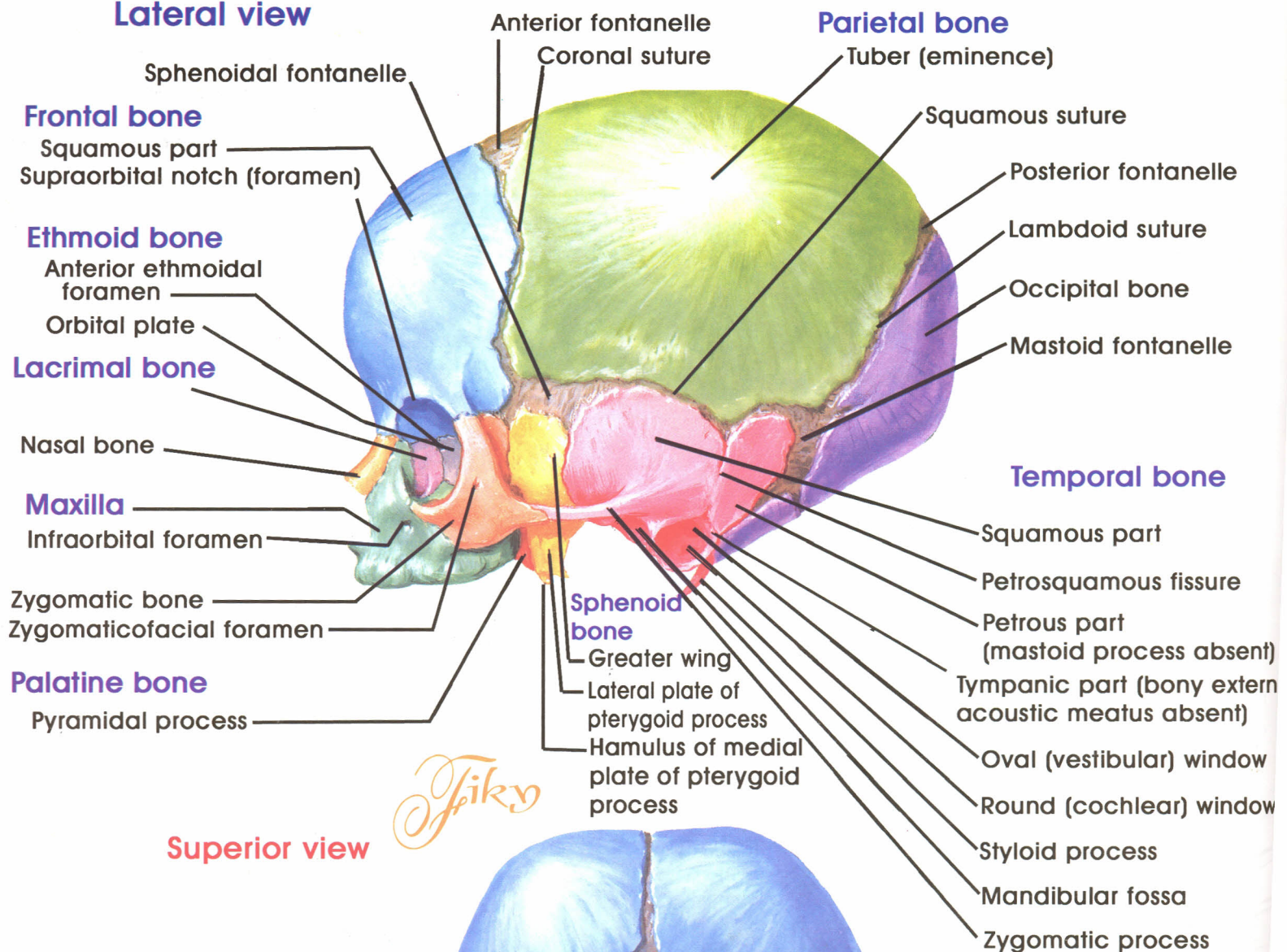


Skull base

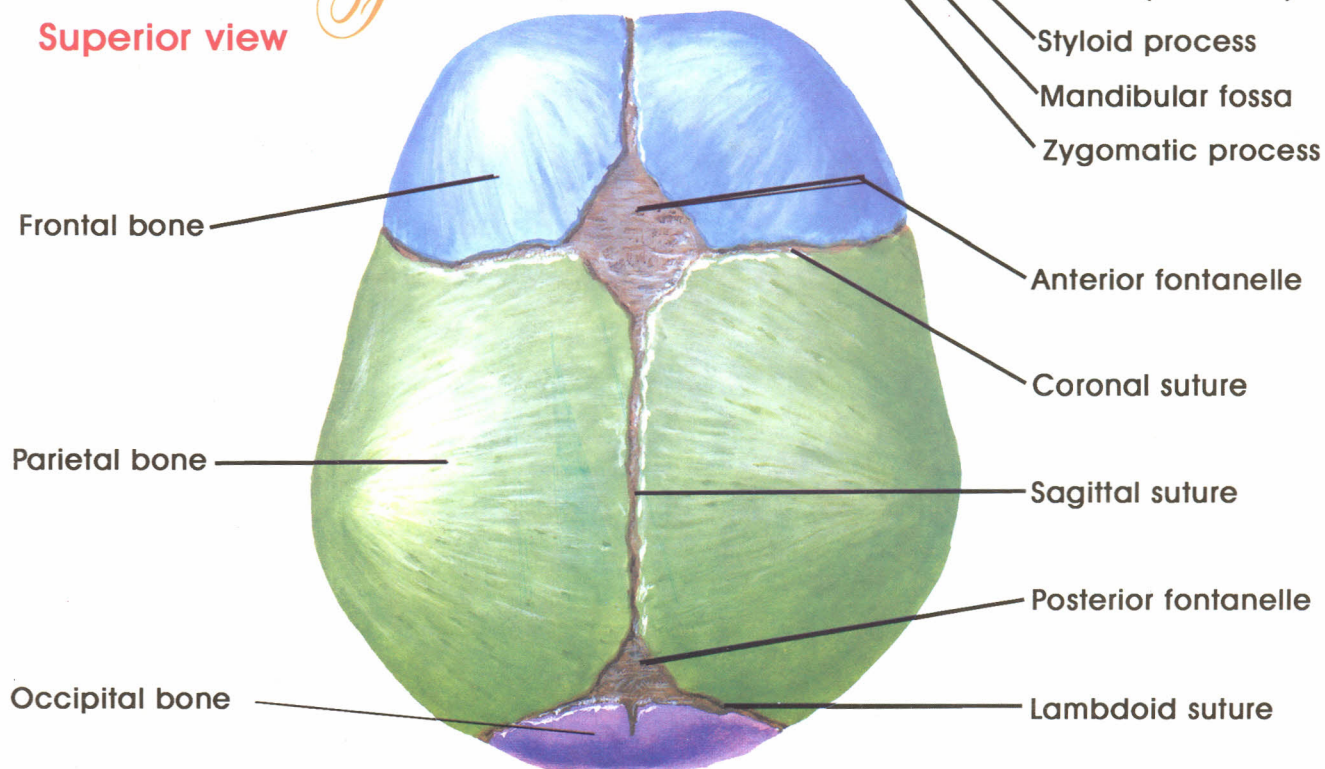


Skull - Midsagittal section

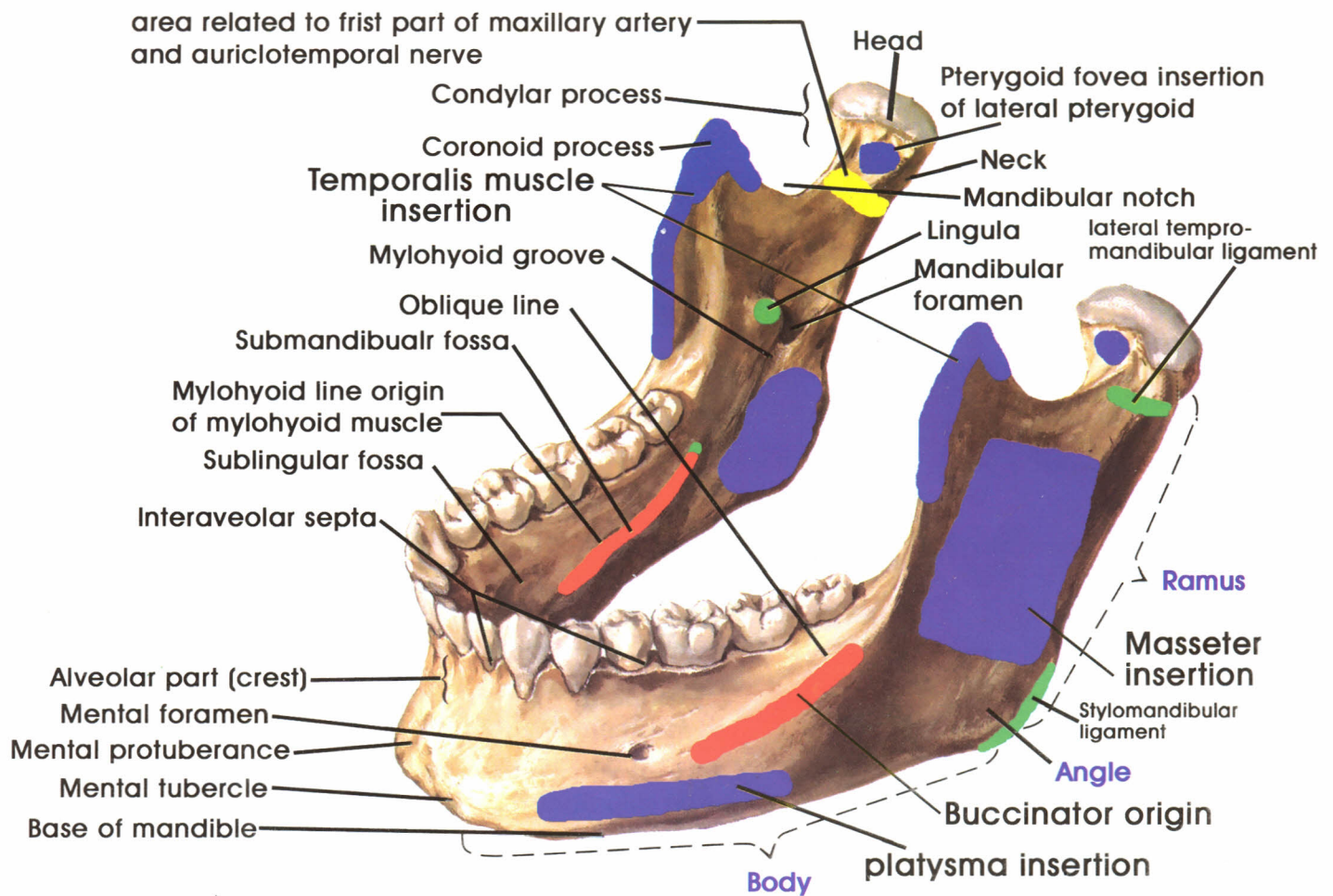
Lateral view



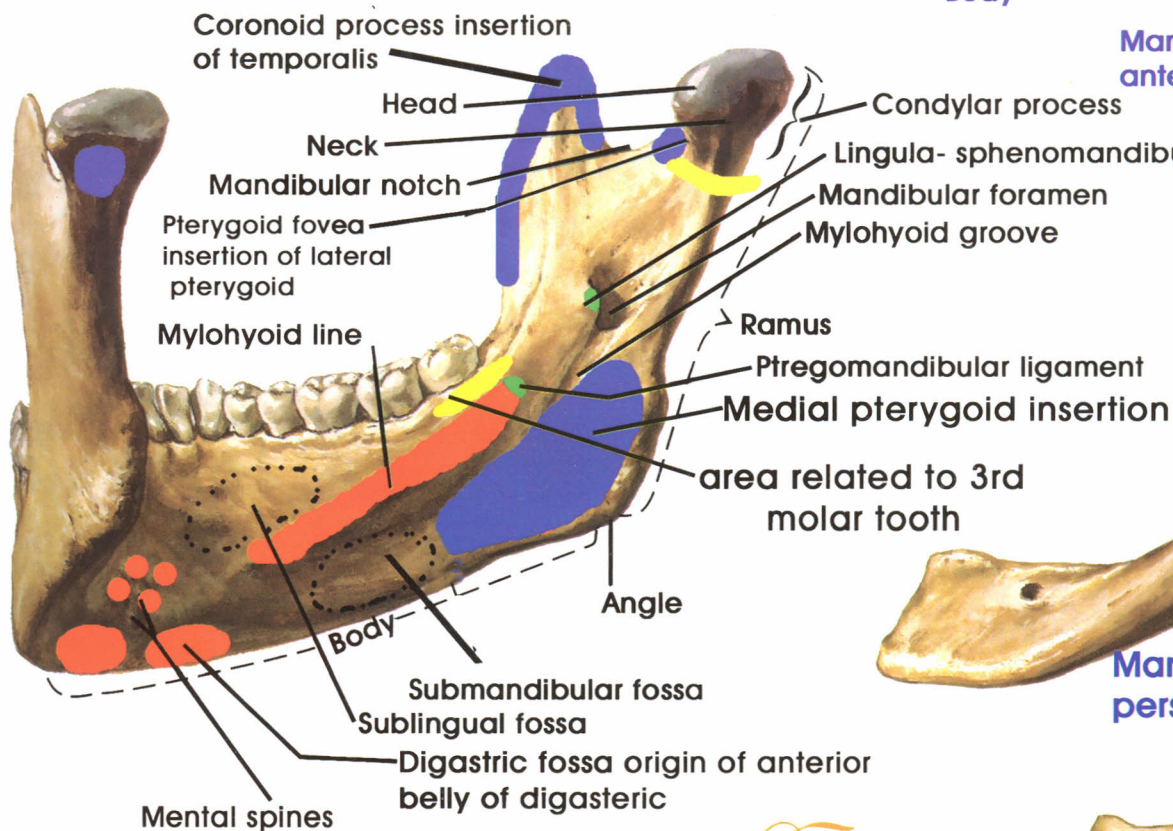
Superior view



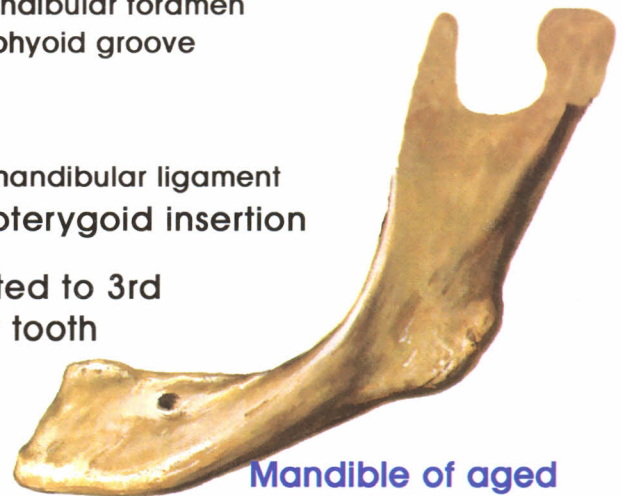
Skull of newborn



**Mandible of adult:
anterolateral superior view**



**Mandible of adult:
left posterior view**



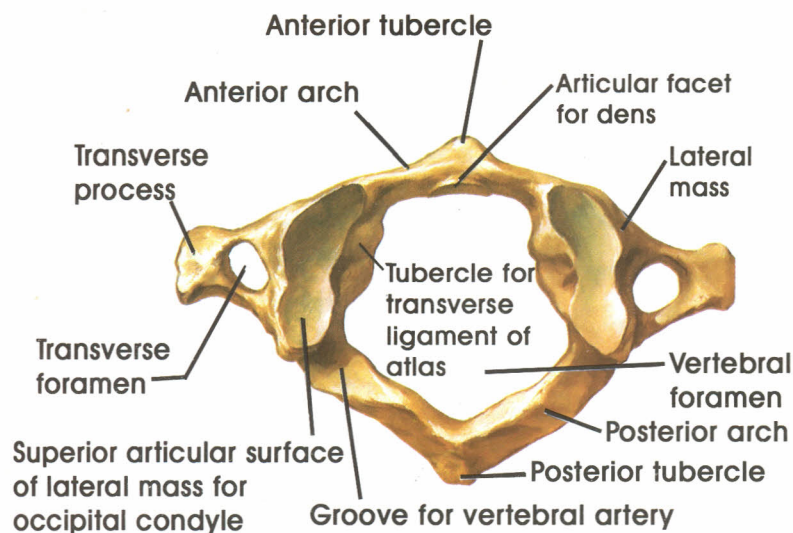
**Mandible of aged
person (adentulous)**



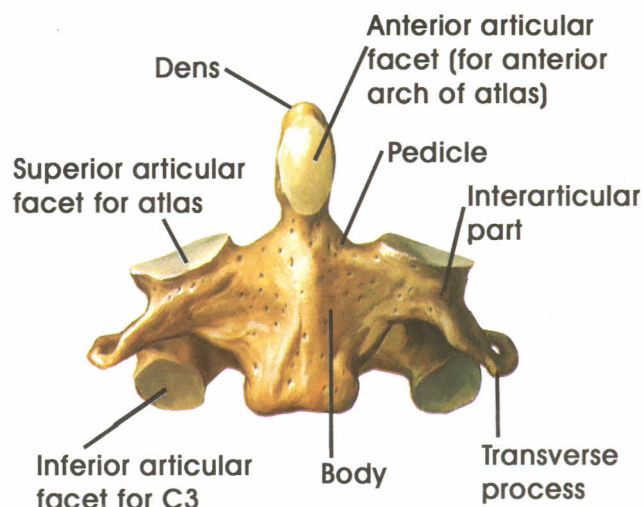
Mandible of infant

El-Fiky

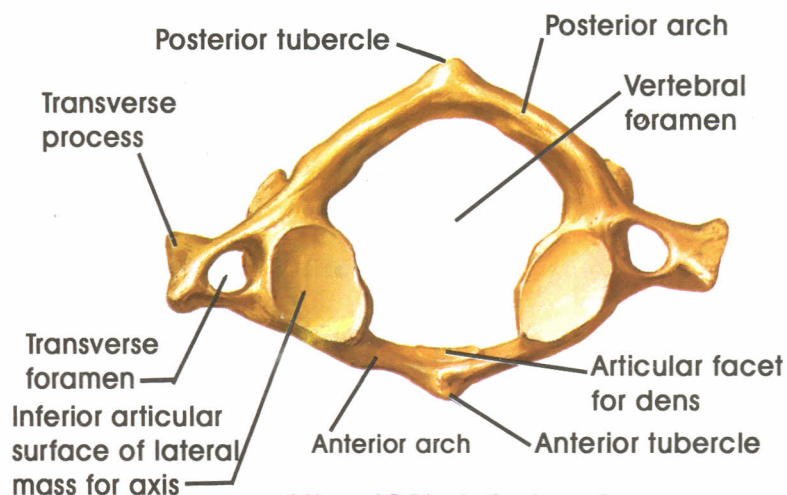
Mandible



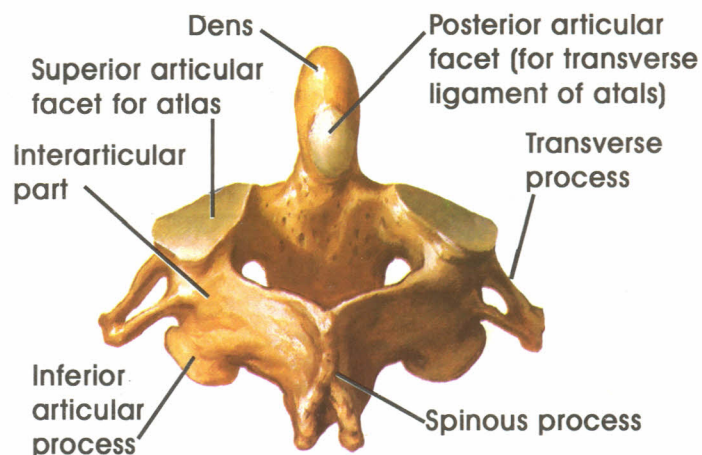
Atlas (C1): superior view



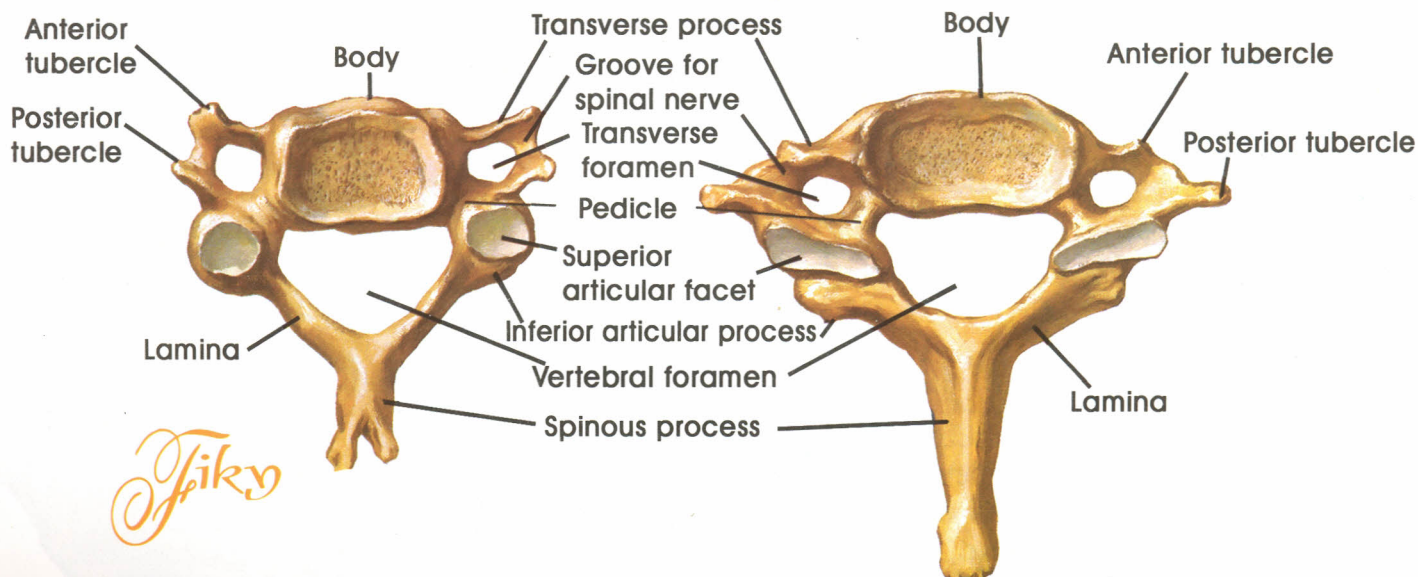
Axis (C2): anterior view



Atlas (C1): inferior view

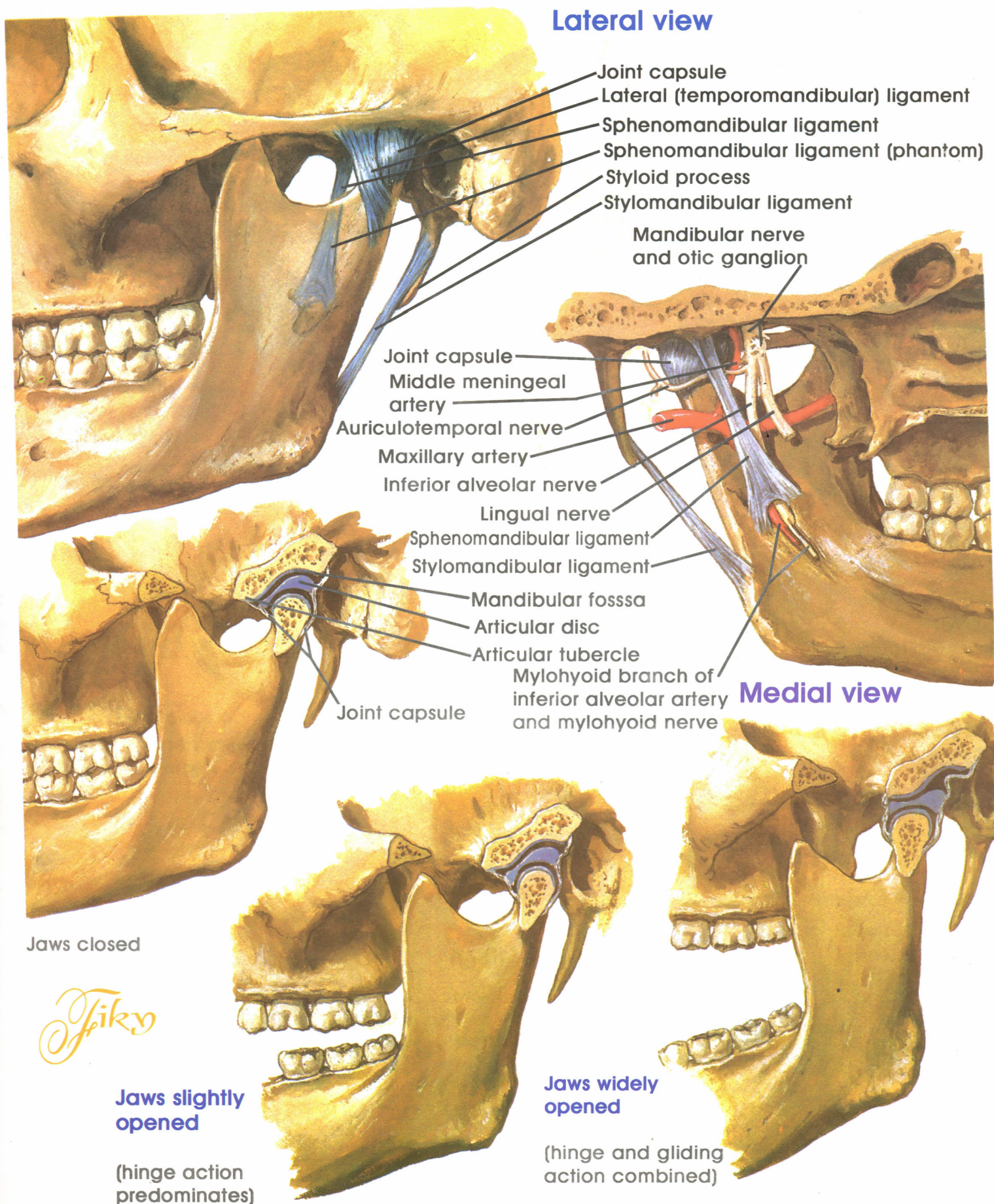


Axis (C2): posterosuperior view



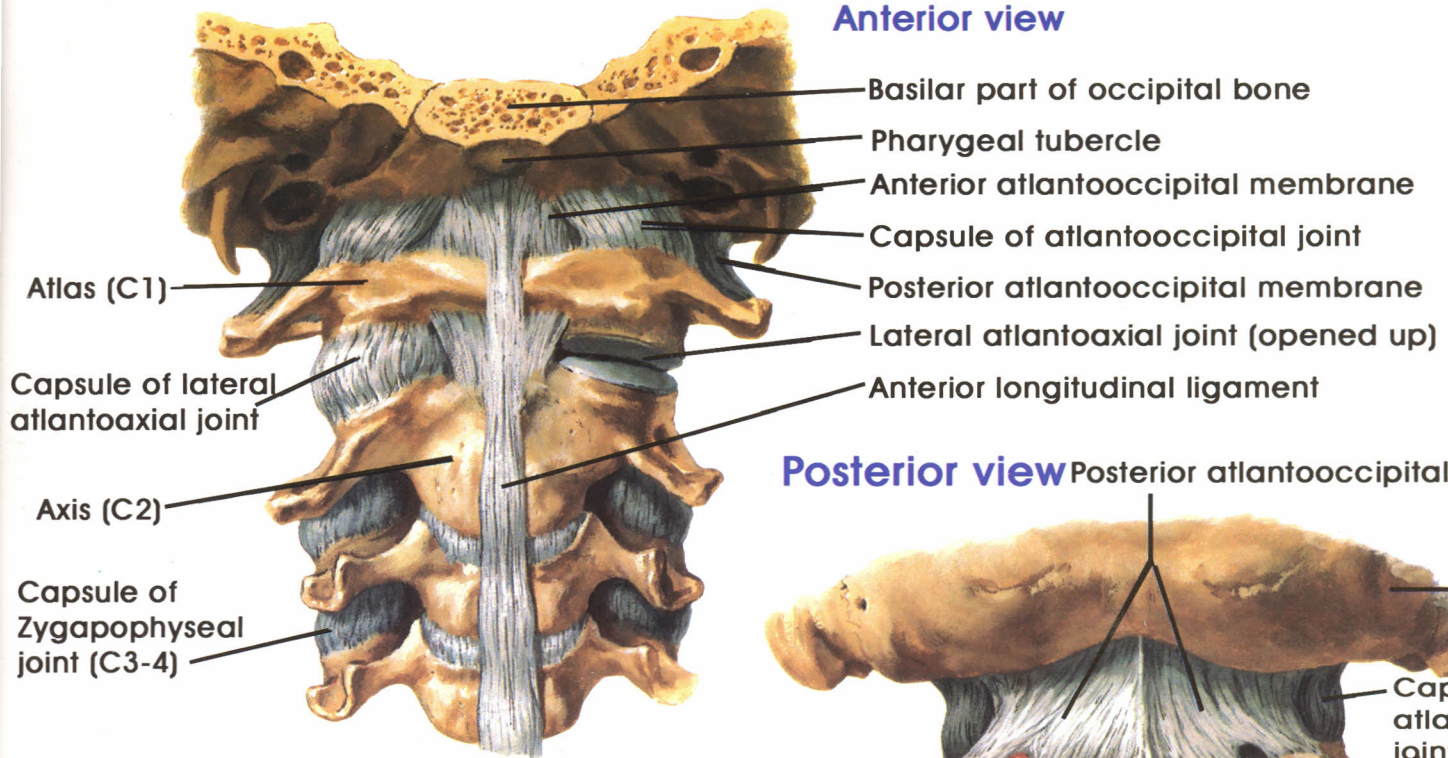
4th cervical vertebra: superior view

7th cervical vertebra: superior view

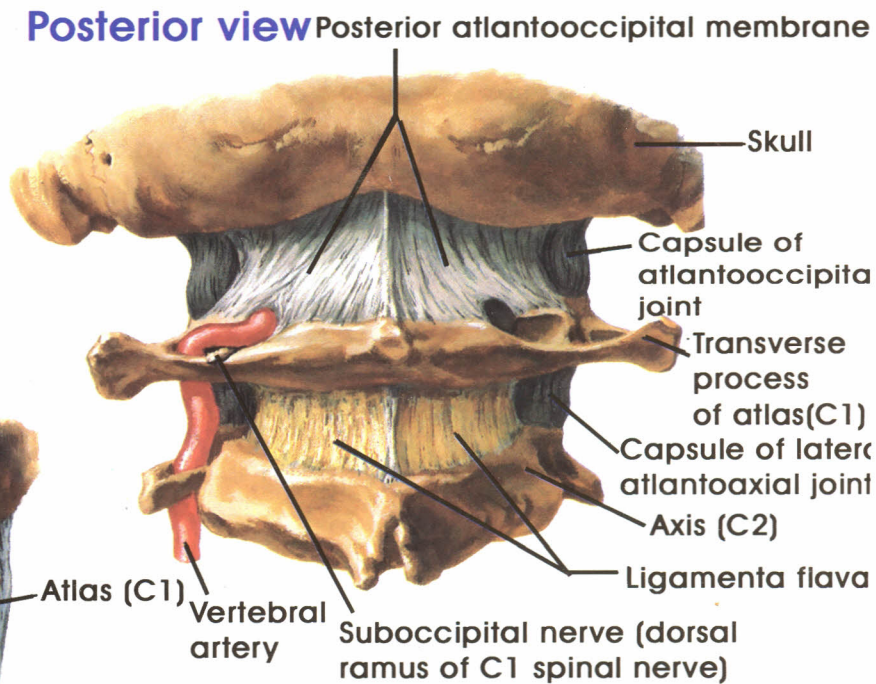


Temporomandibular Joint

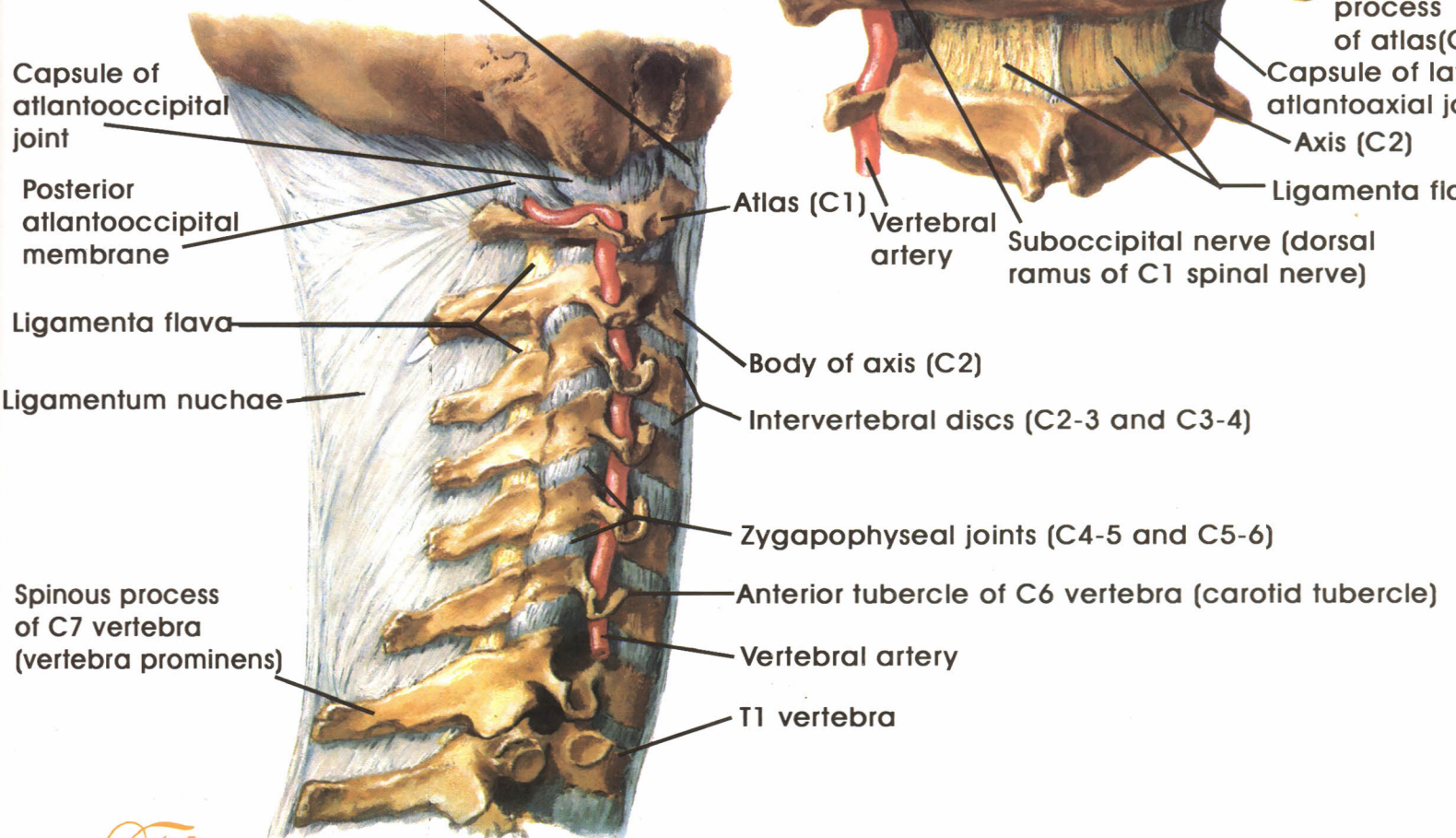
Anterior view



Posterior view



Anterior atlantooccipital membrane

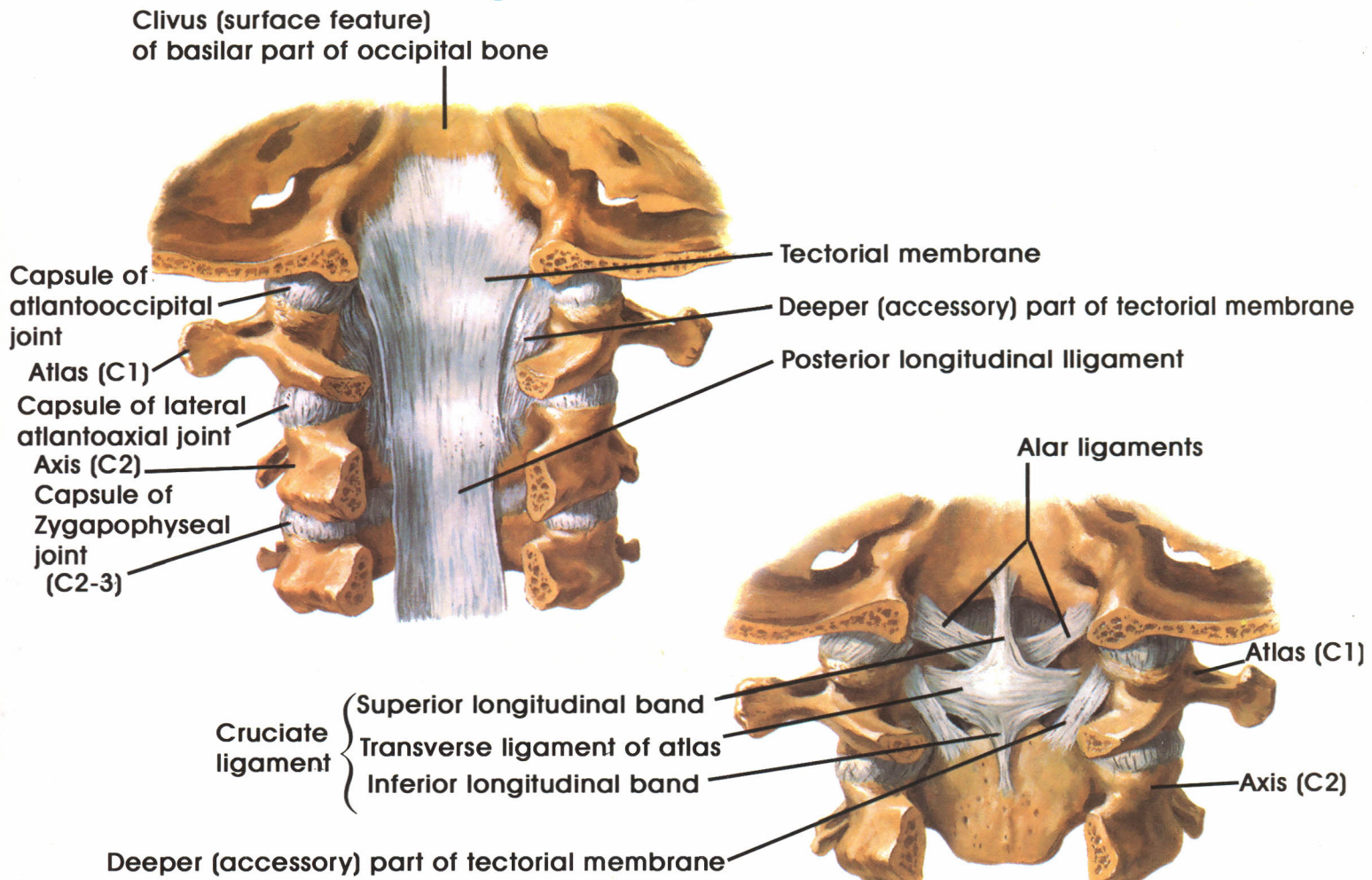


Right lateral view

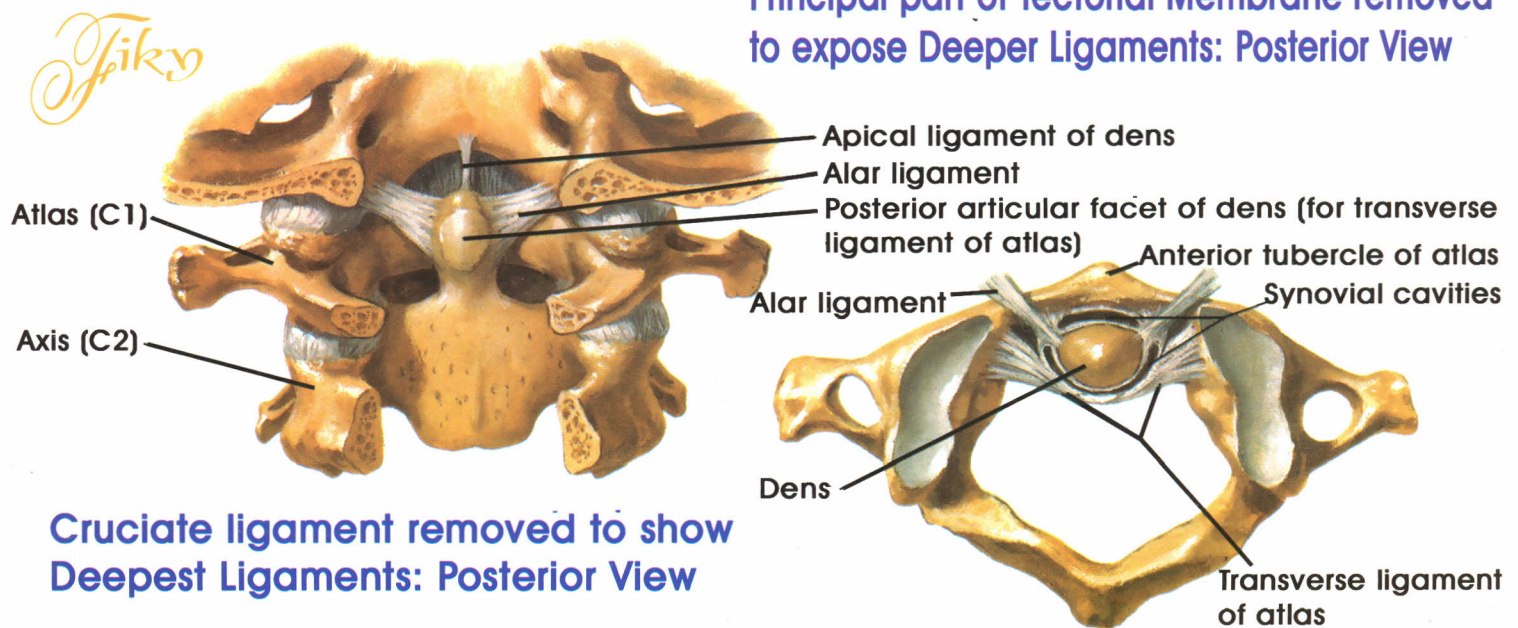
External craniocervical ligaments

El-Fiky

Upper part of vertebral canal with spinous processes and parts of vertebral arches removed to expose Ligaments on posterior vertebral bodies: Posterior View

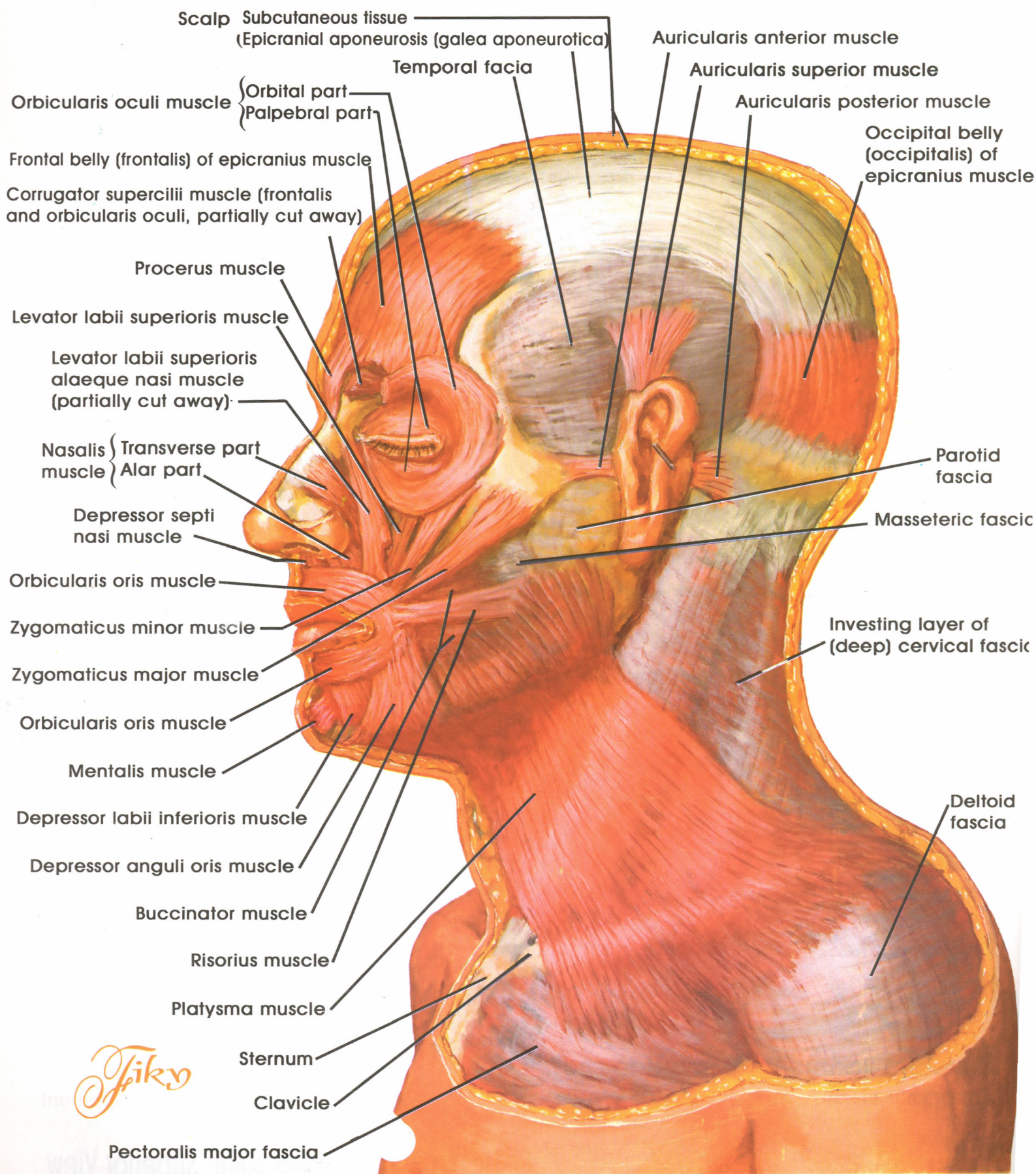


Principal part of Tectorial Membrane removed to expose Deeper Ligaments: Posterior View



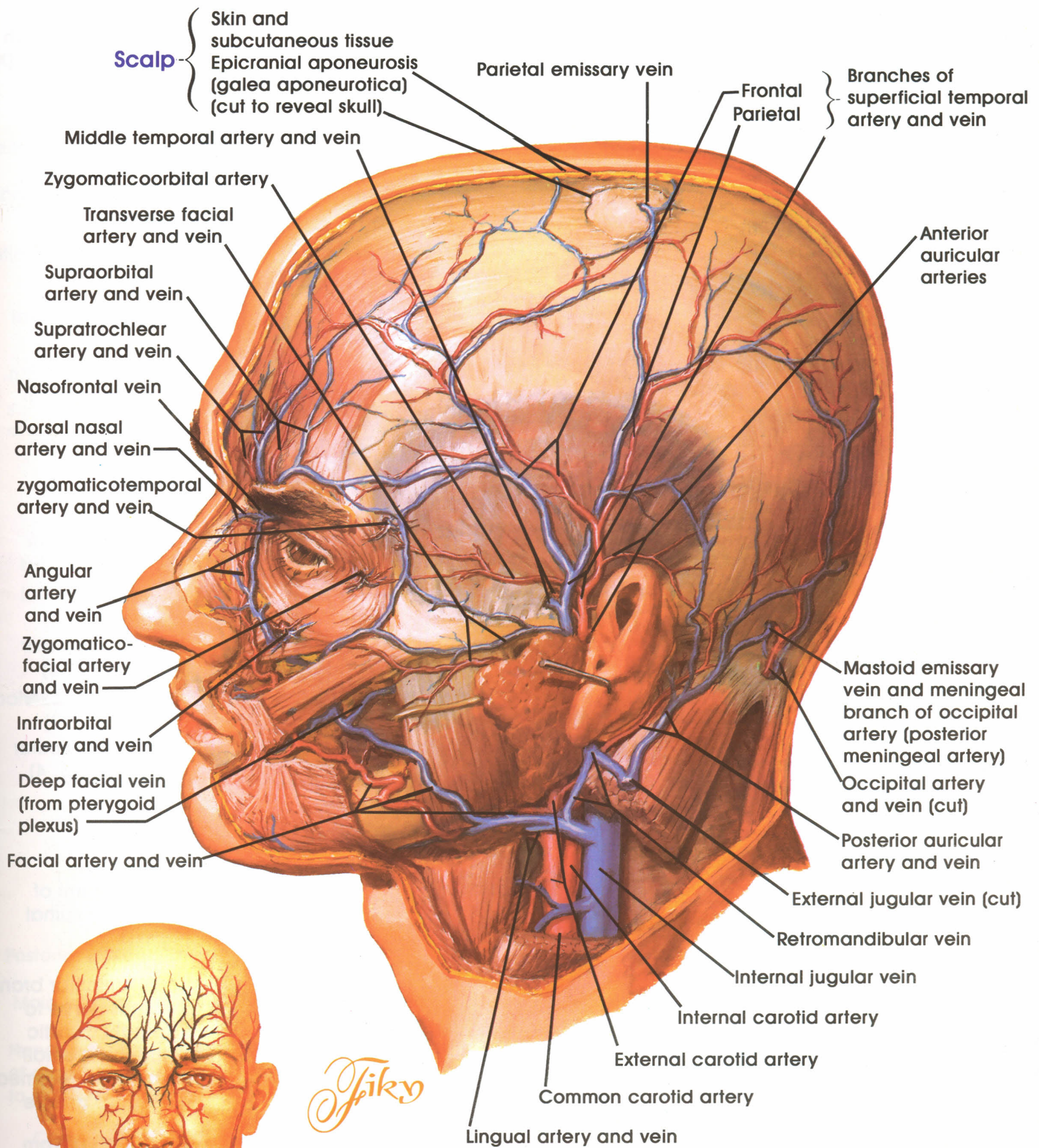
Median Atlantoaxial Joint: Superior View

Internal Craniocervical Ligaments

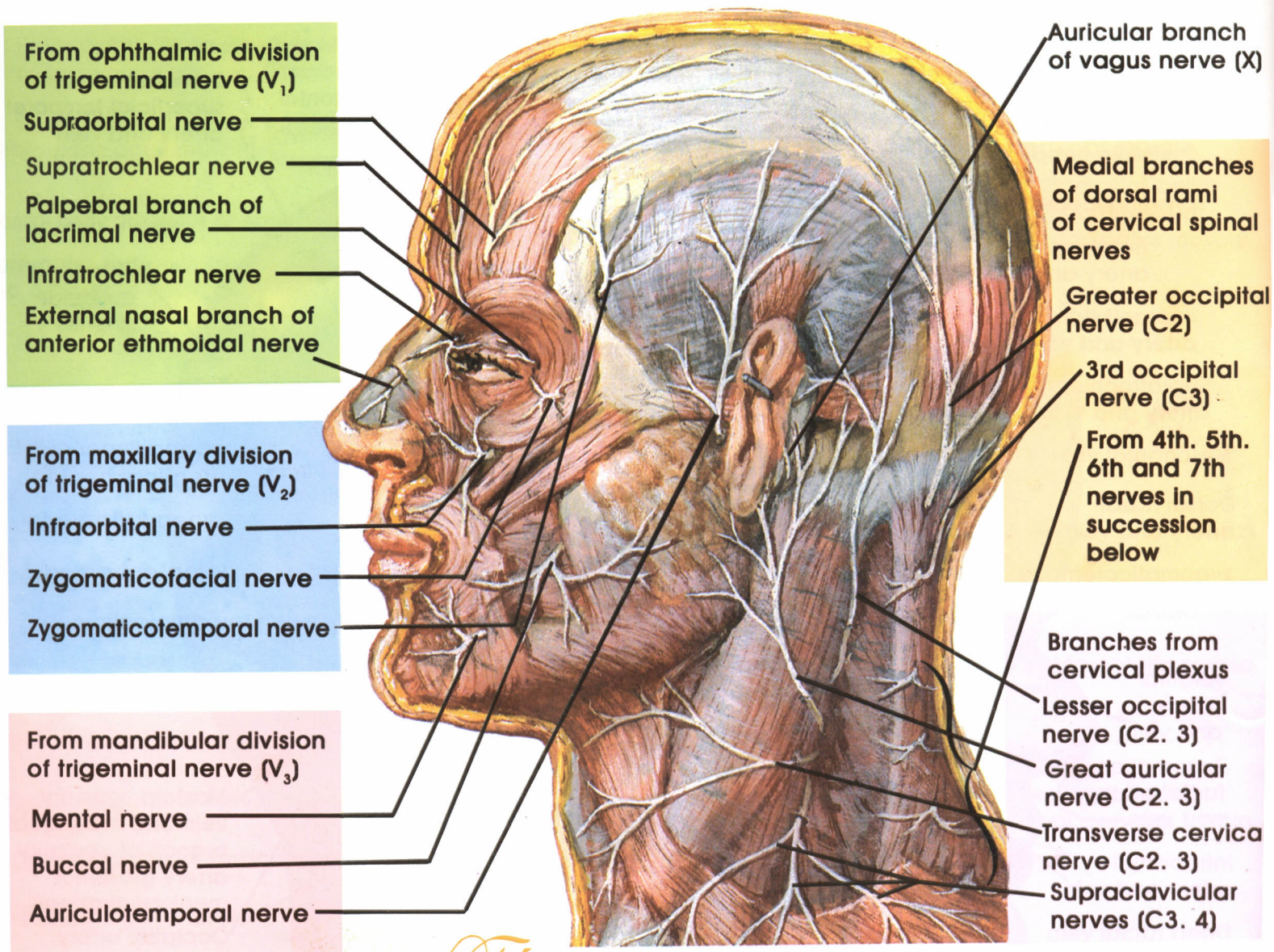


Spiky

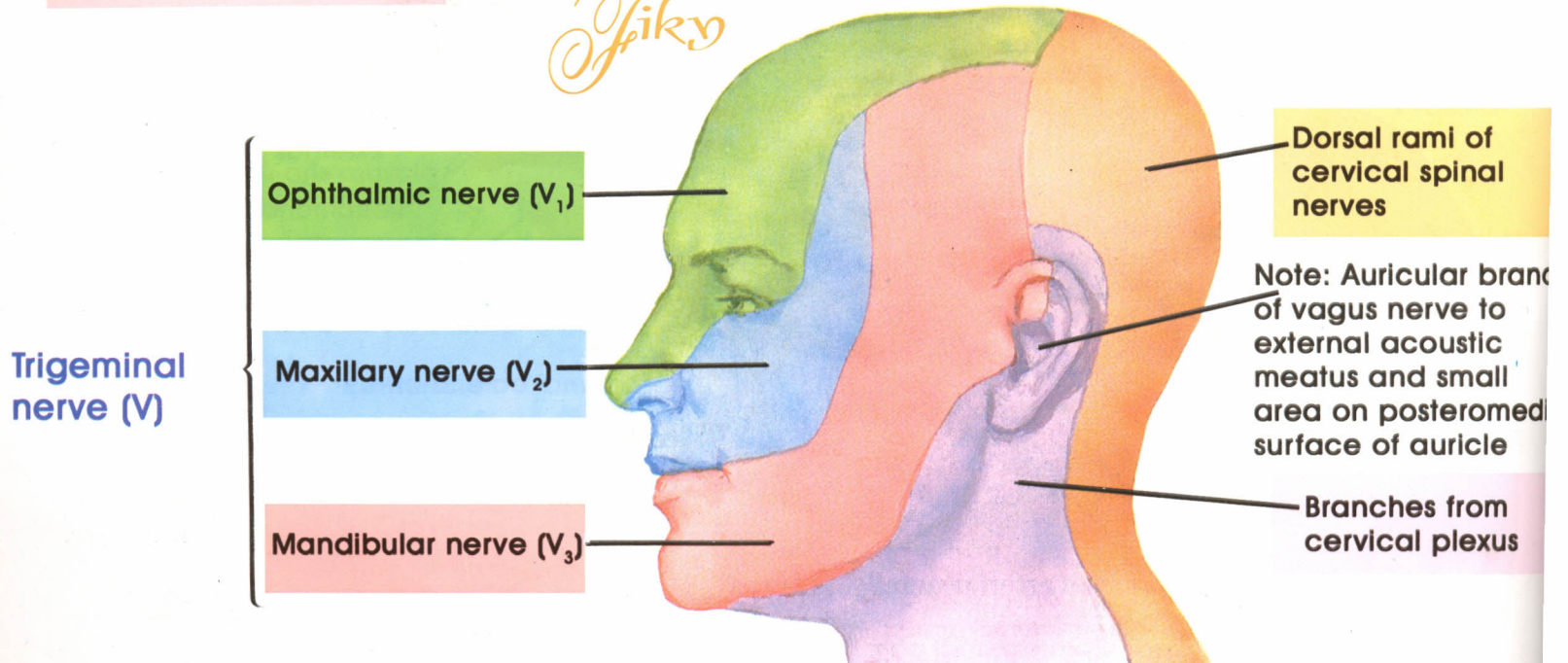
Muscles of Facial Expression - Lateral View



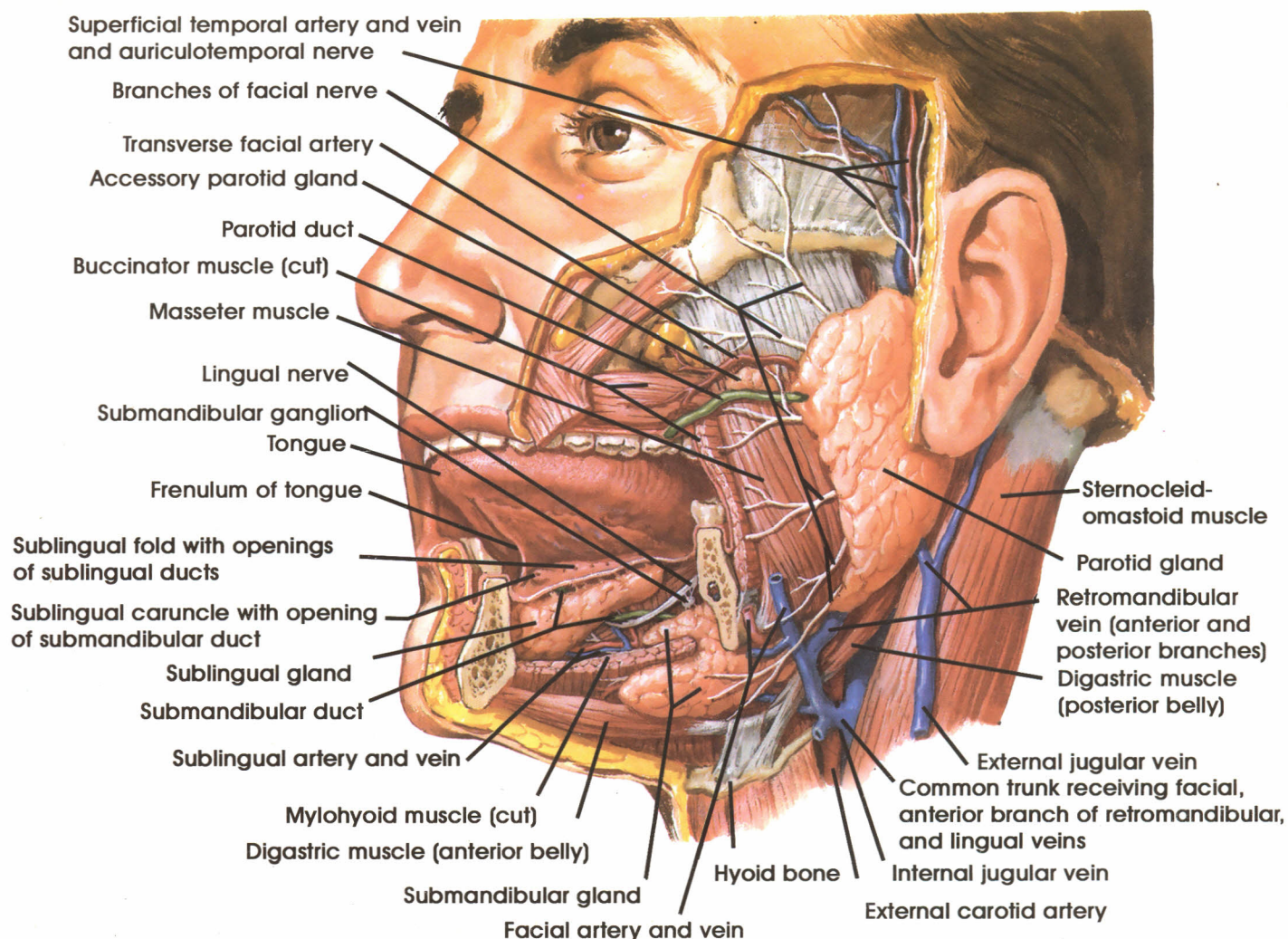
Blood Supply of the Face



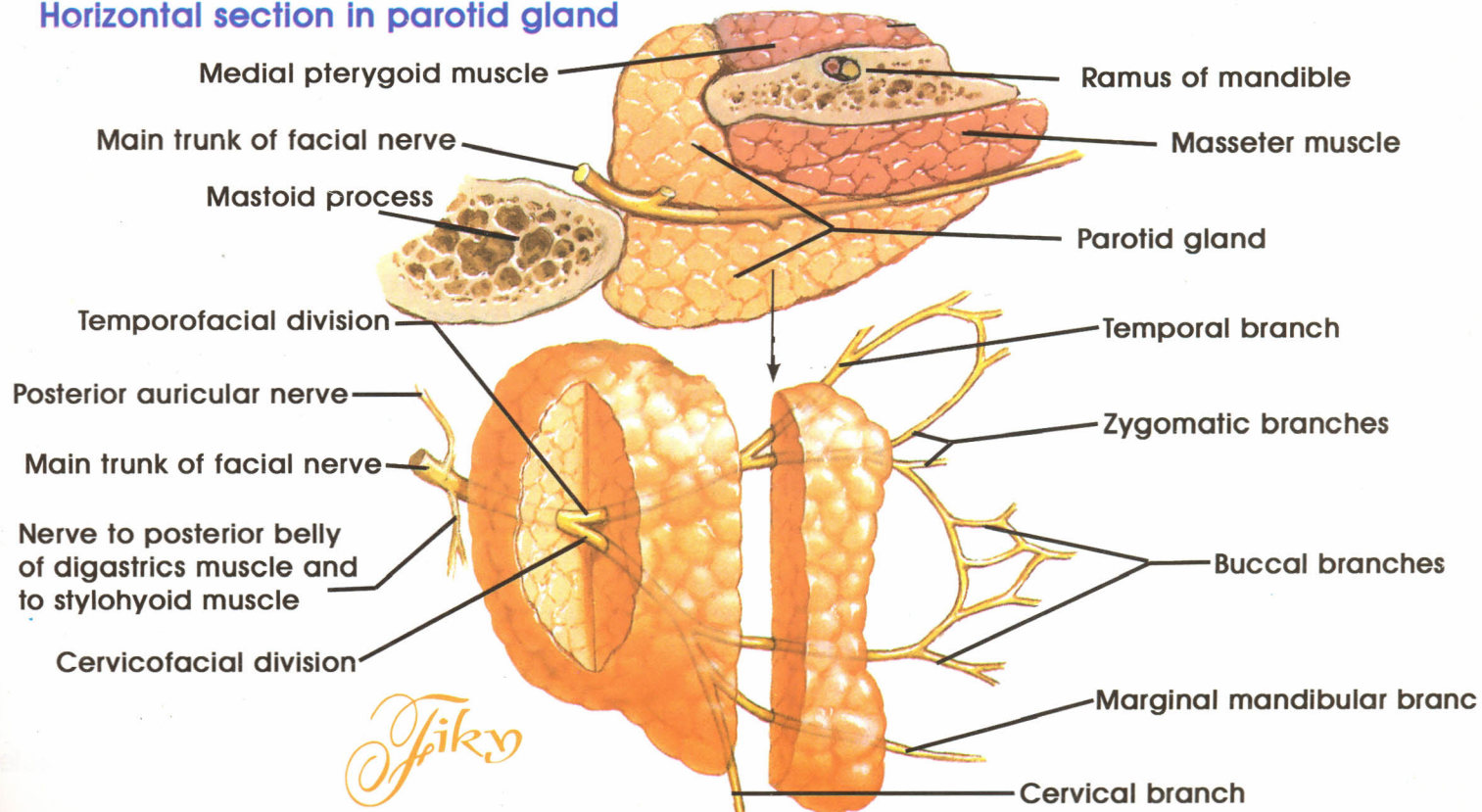
Spiky



Cutaneous Nerves of the Head and Neck

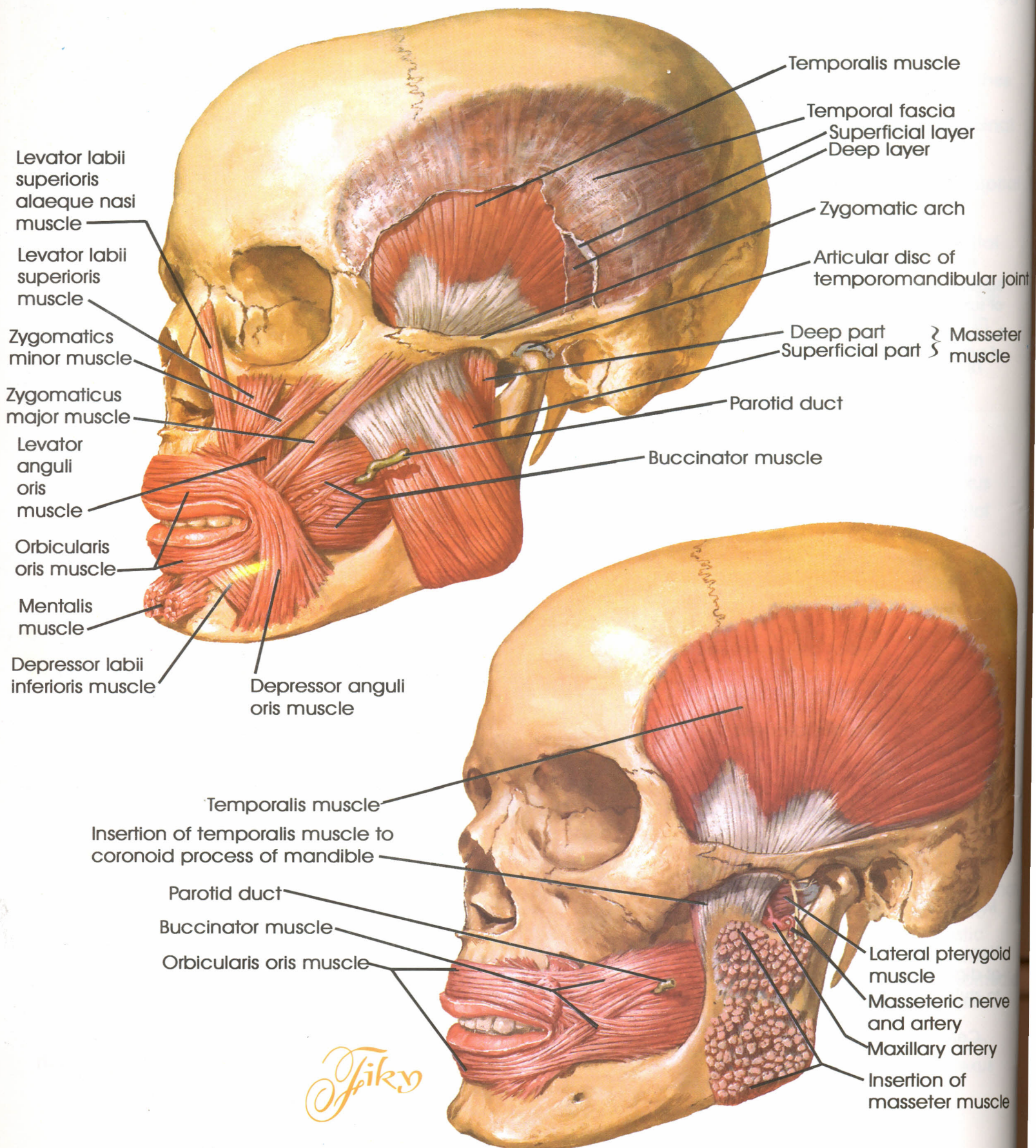


Horizontal section in parotid gland

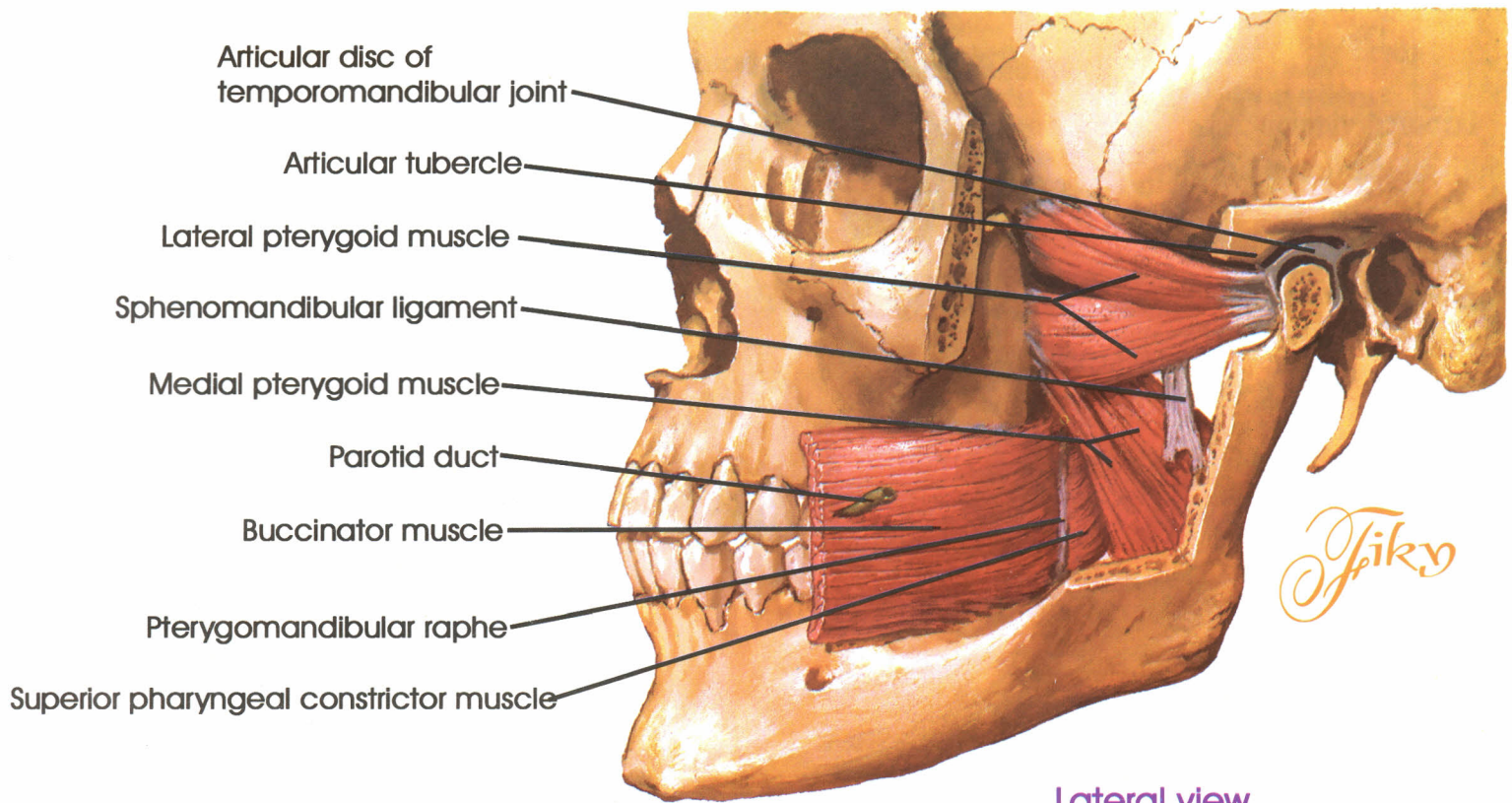


Facial nerve branches in the Parotid gland

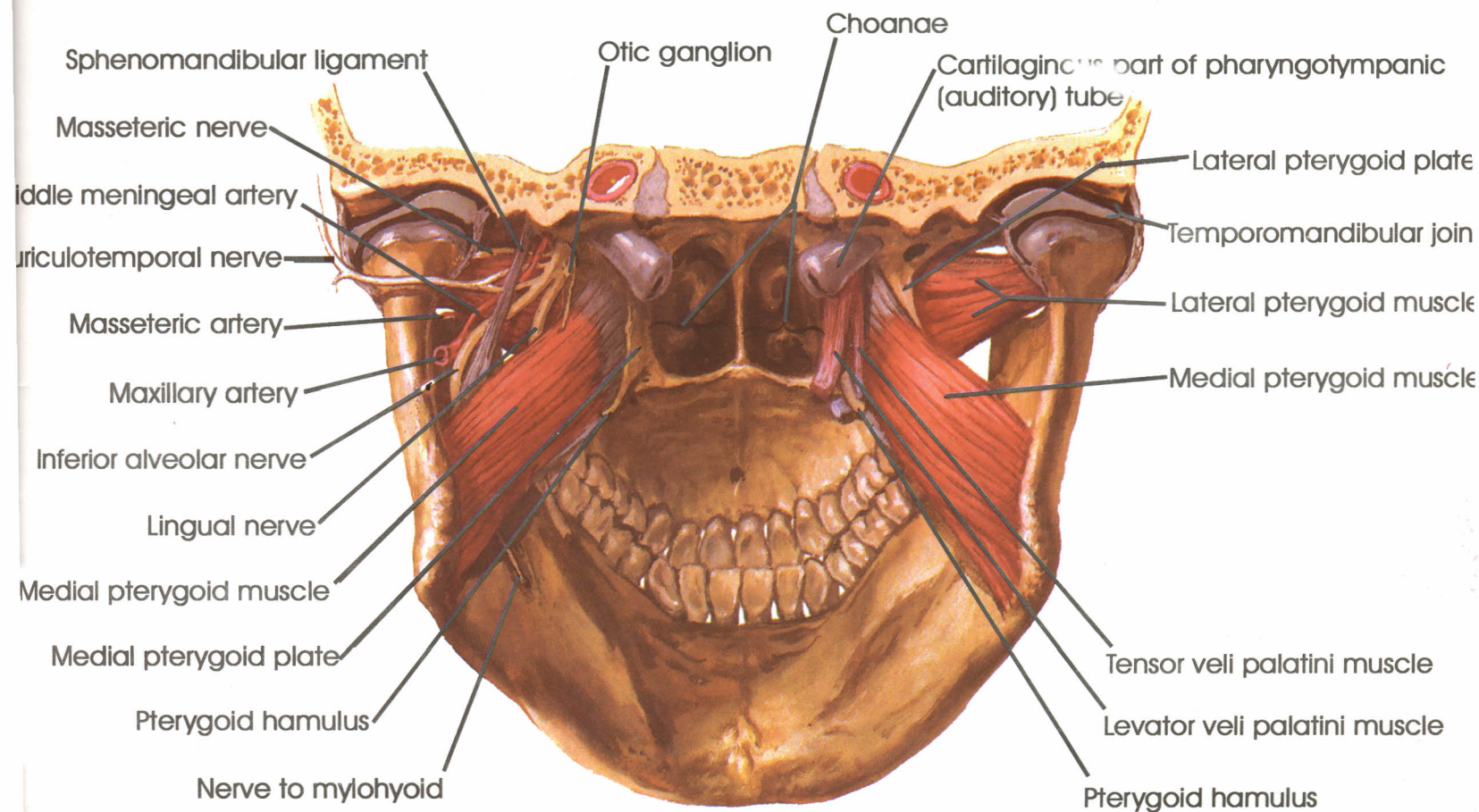
Salivary glands



Muscles involved in mastication



Lateral view



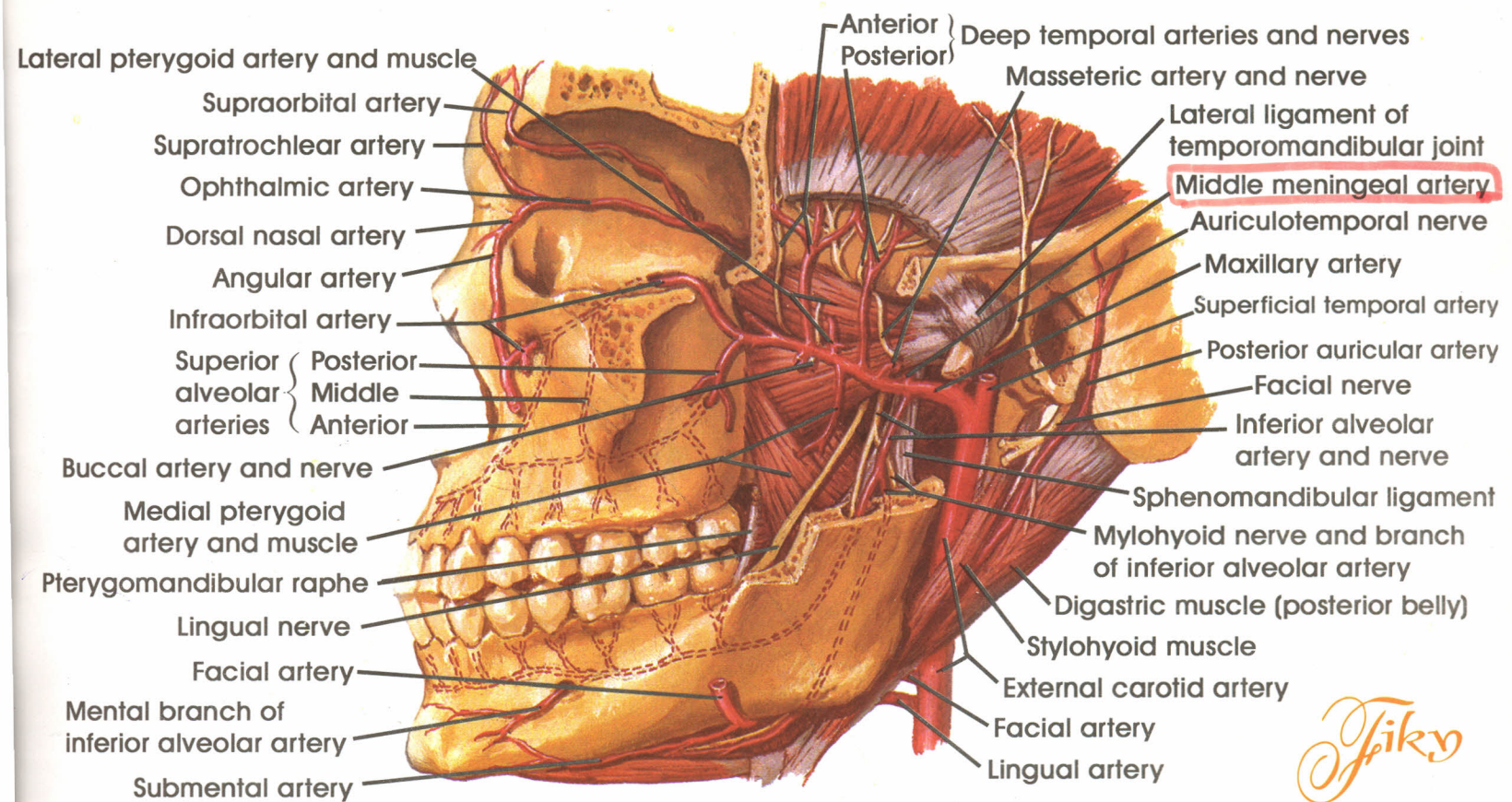
Posterior view

Muscles Involved in Mastication (continued)

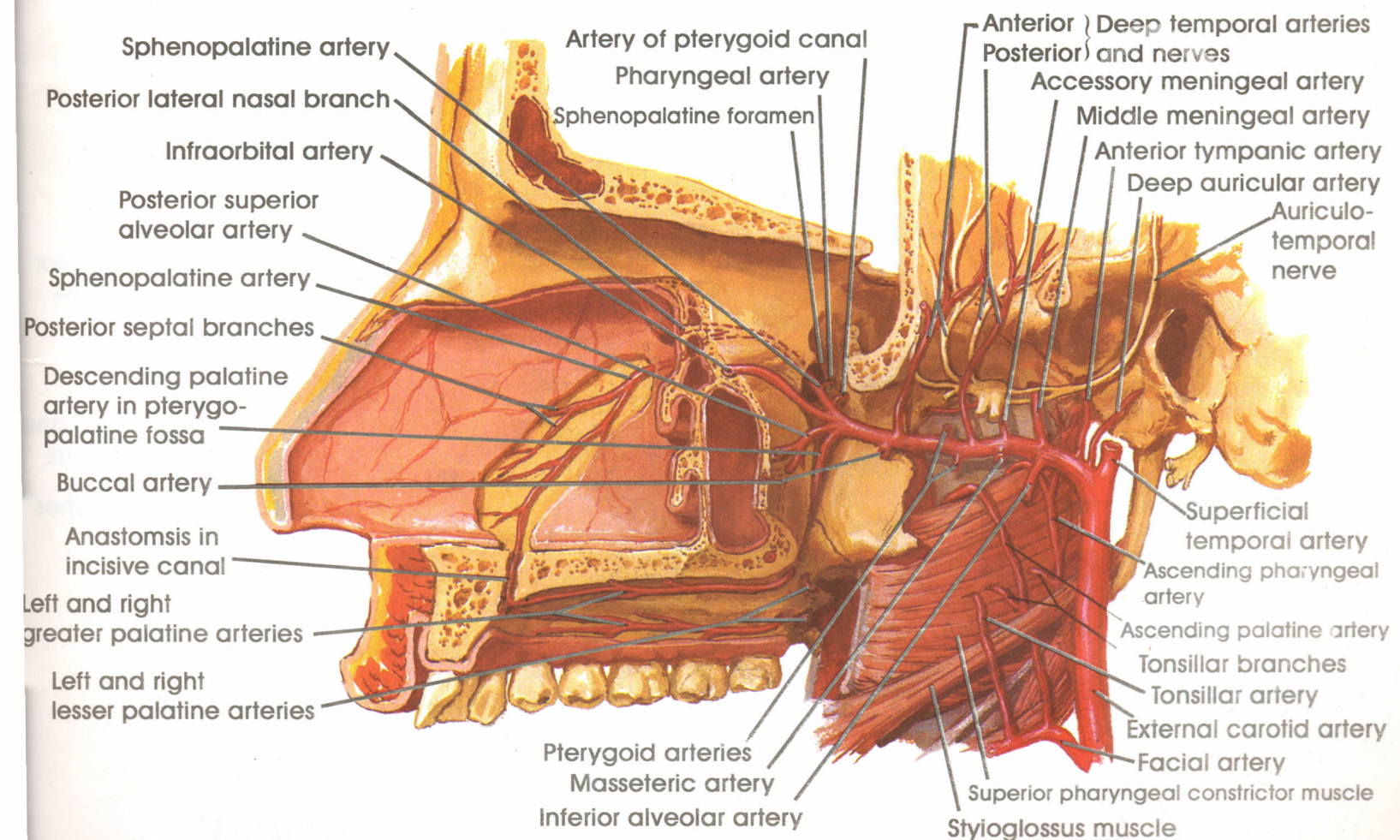
Deep temporal nerves



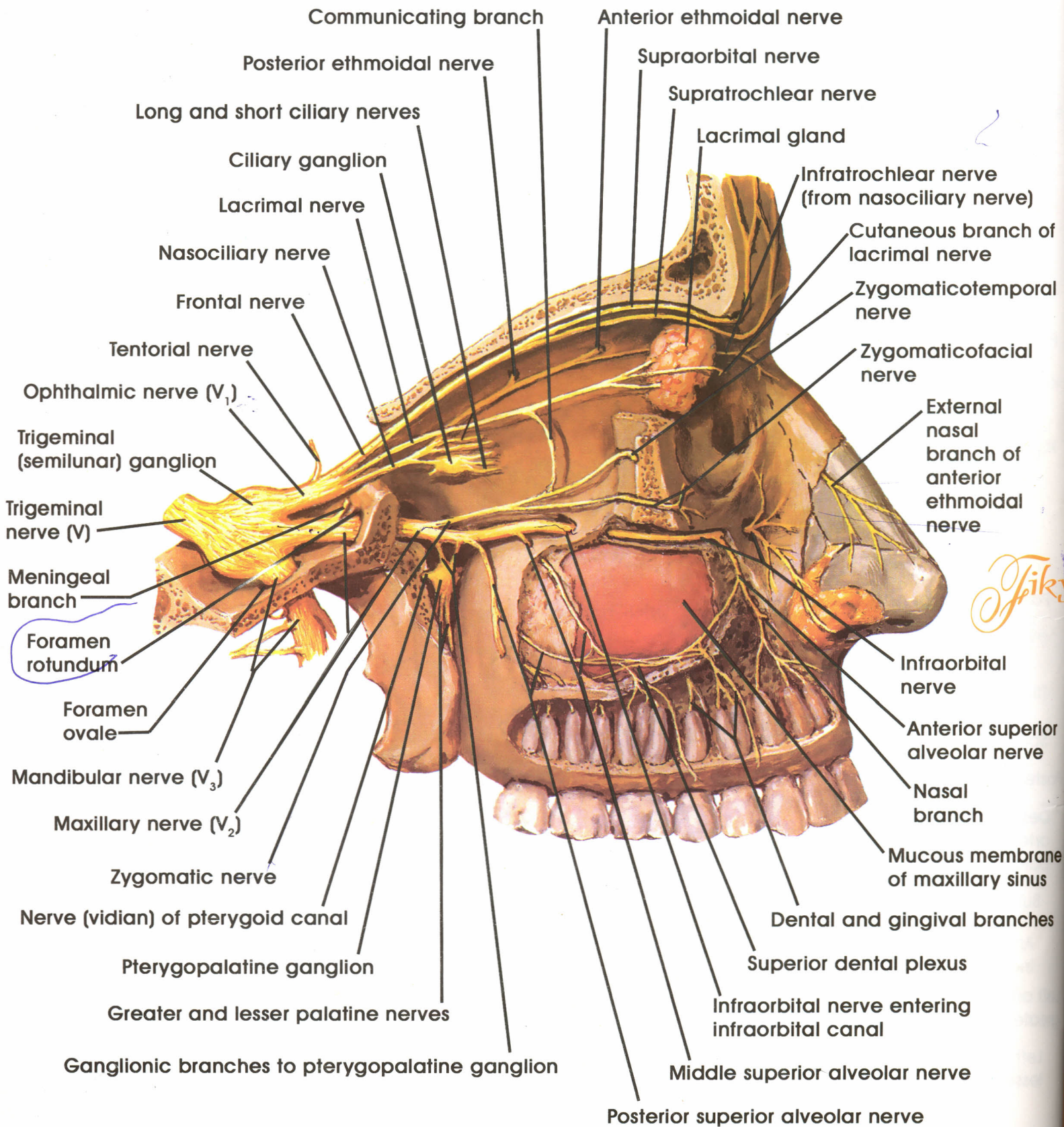
Mandibular Nerve (V3)



Wiley

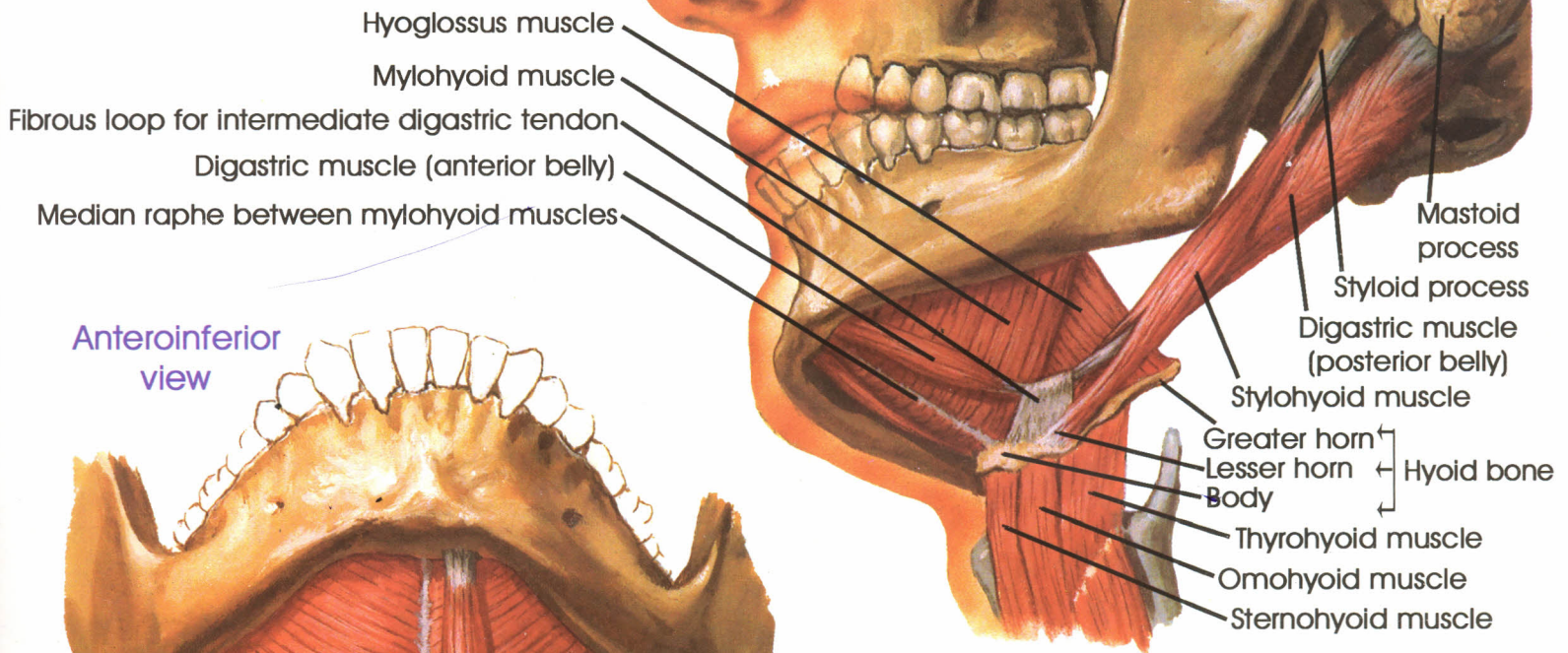


Maxillary artery

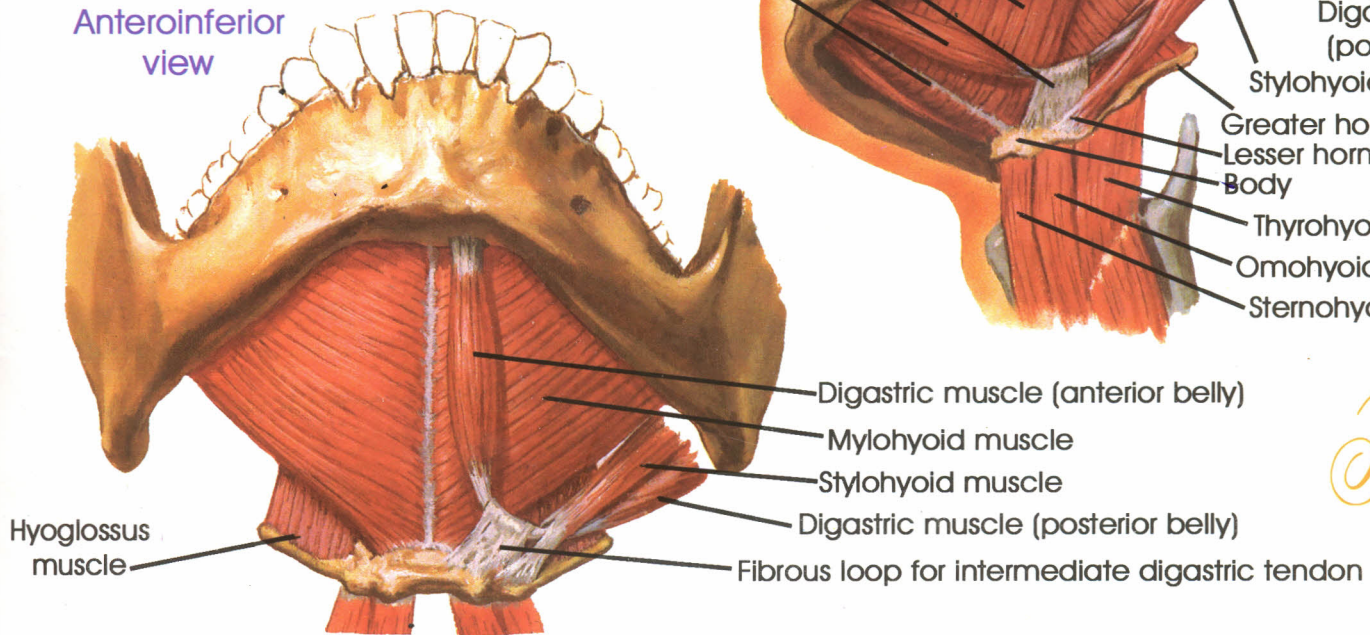


Ophthalmic (v1) and Maxillary(V2)

Lateral, slightly inferior view

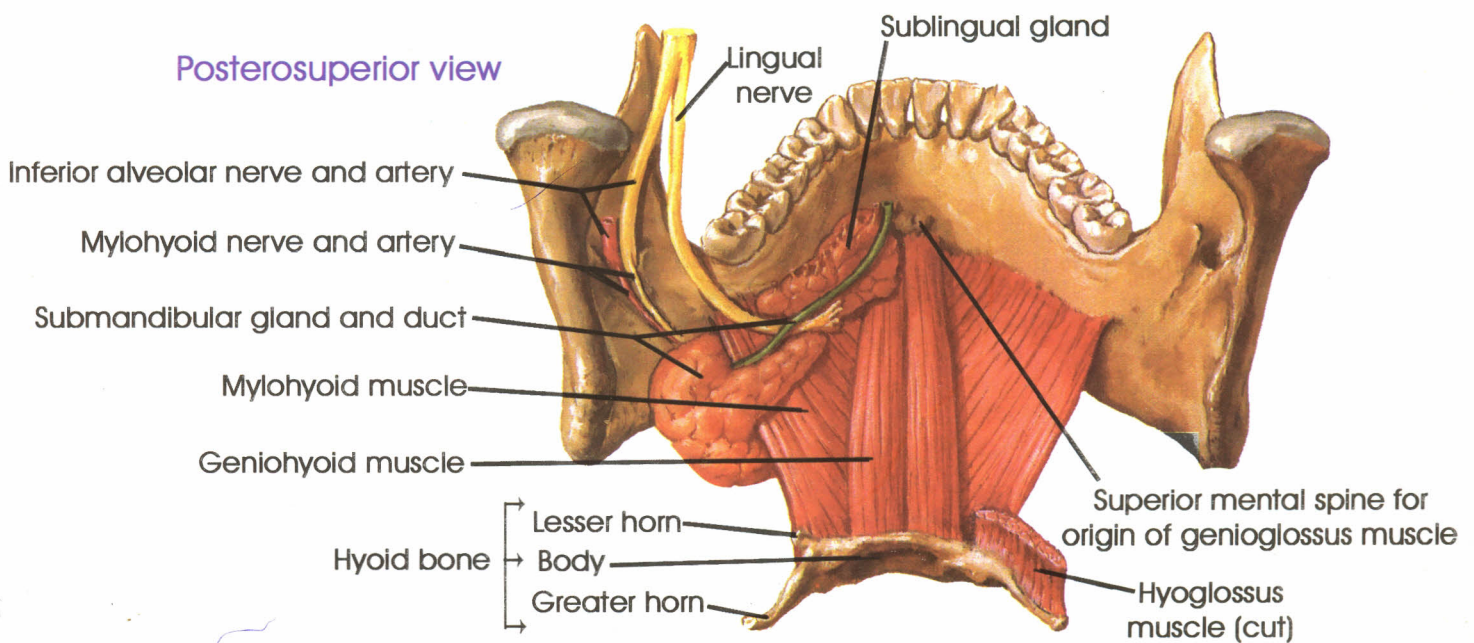


Anteroinferior view

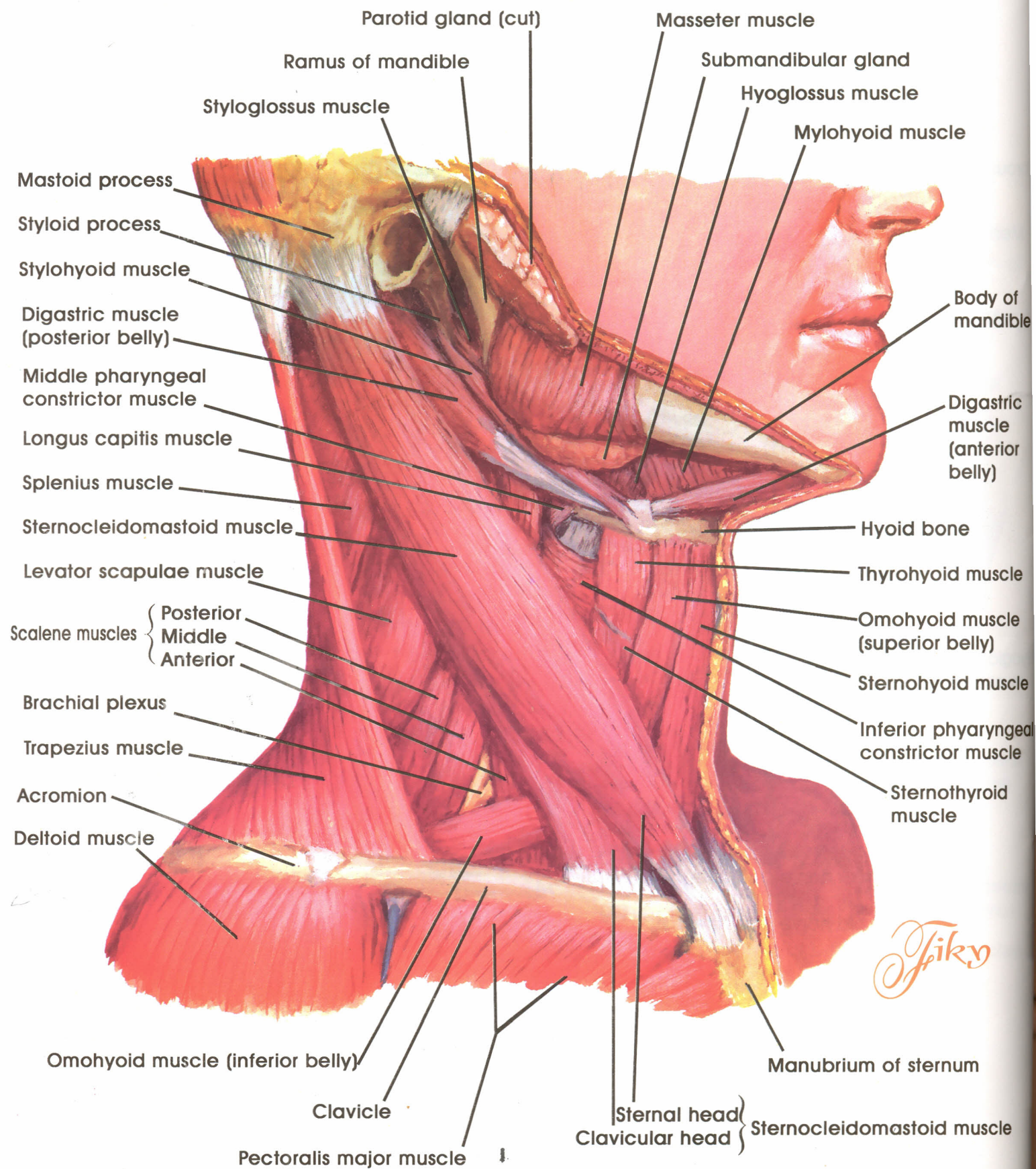


Fiky

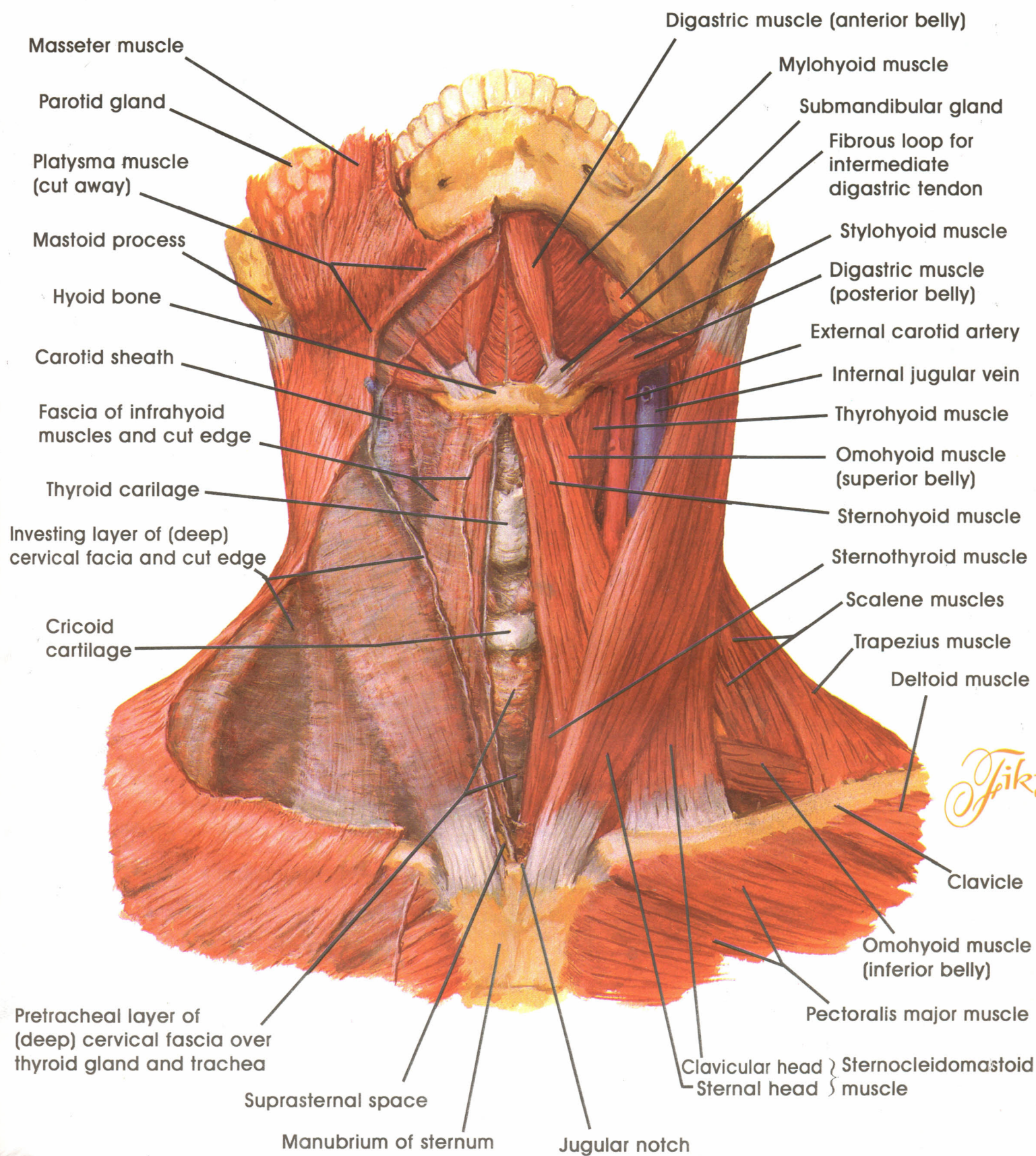
Posterosuperior view



Floor of Mouth



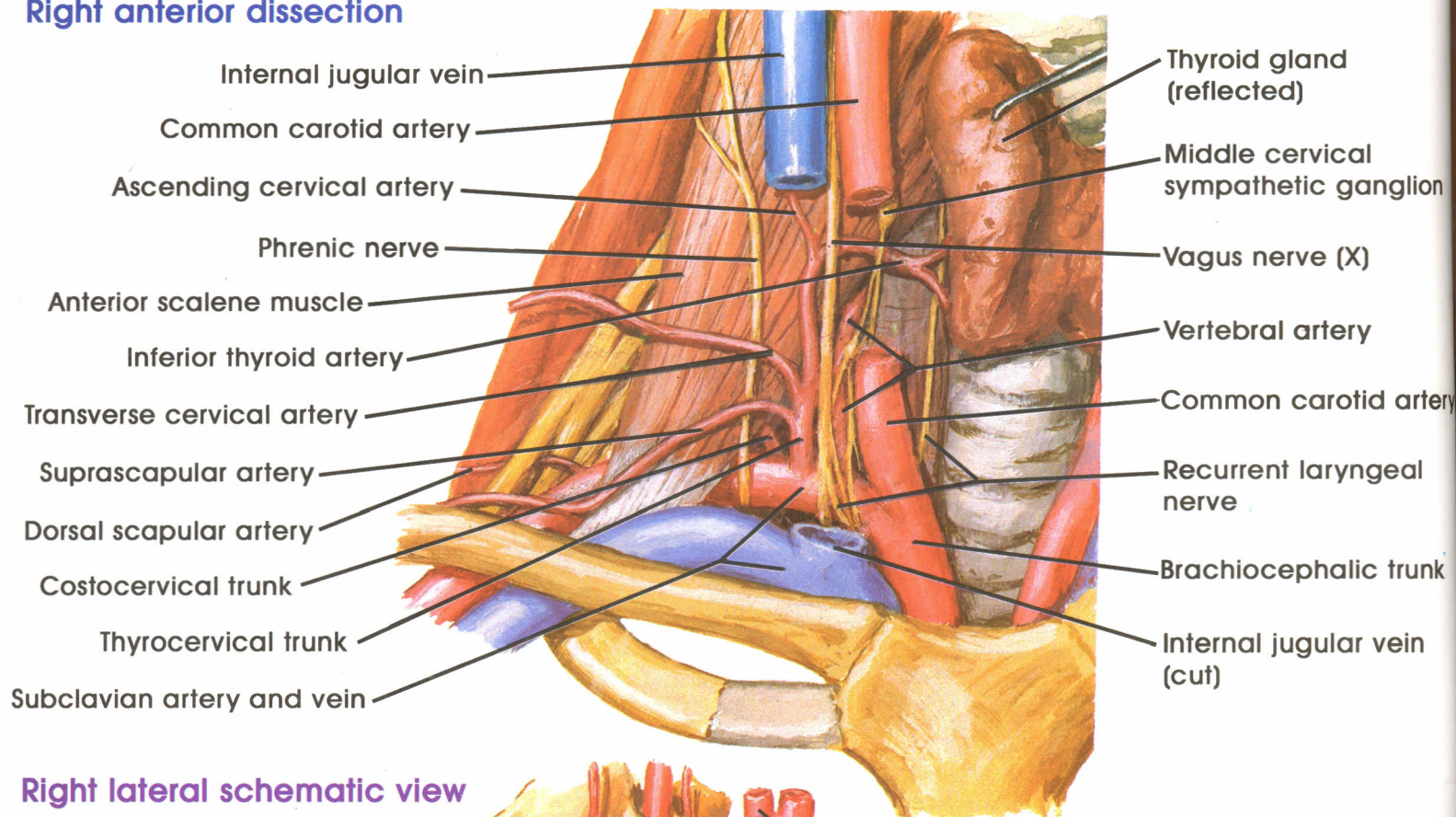
Muscles of neck - Lateral View



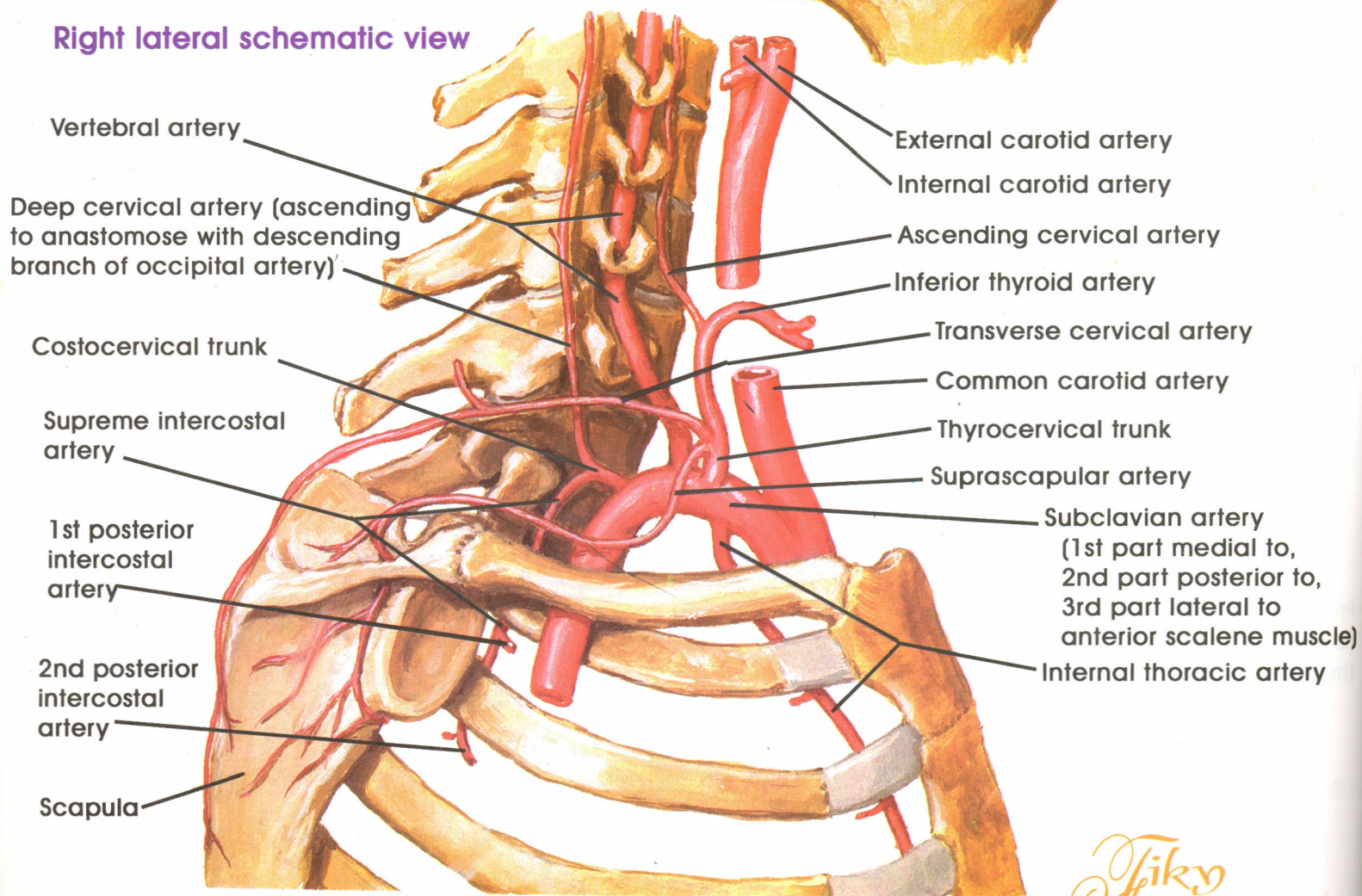
Spiky

Muscles of Neck- anterior view

Right anterior dissection

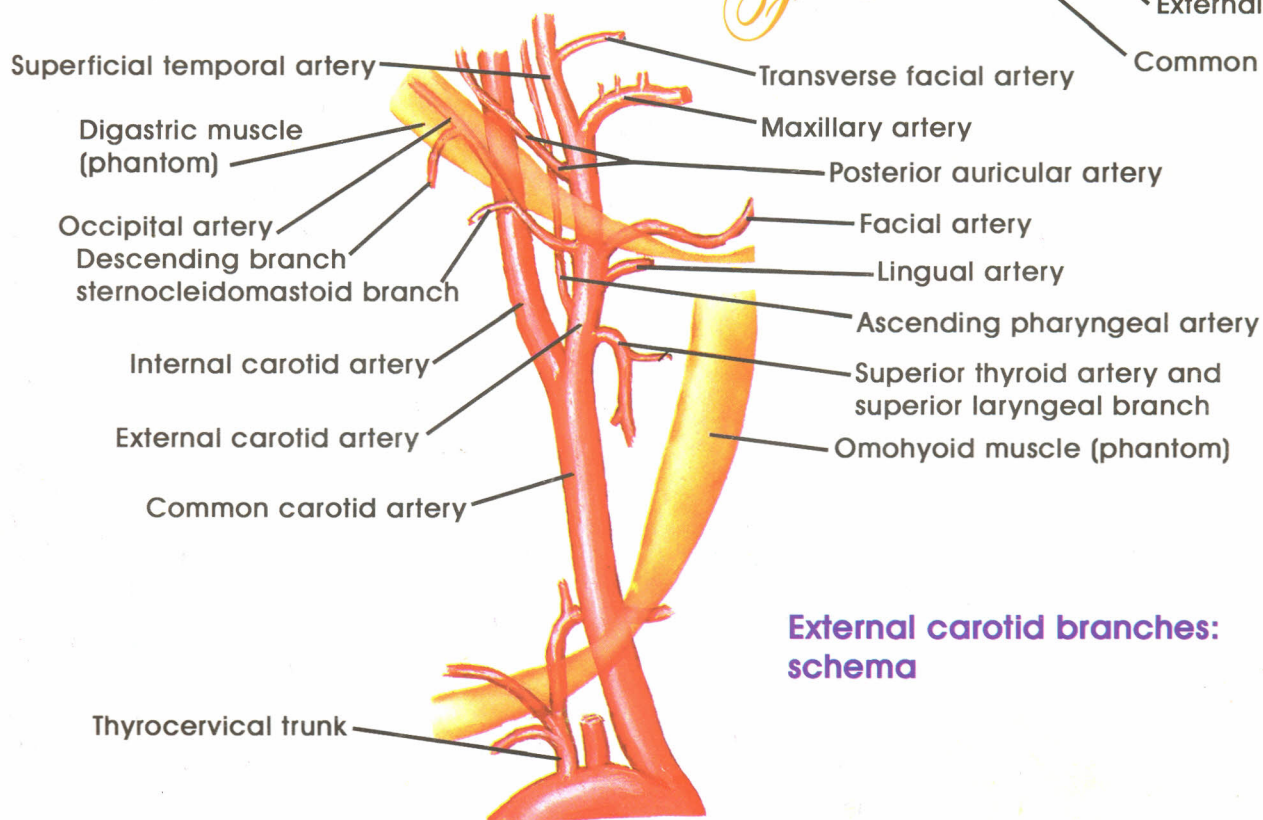
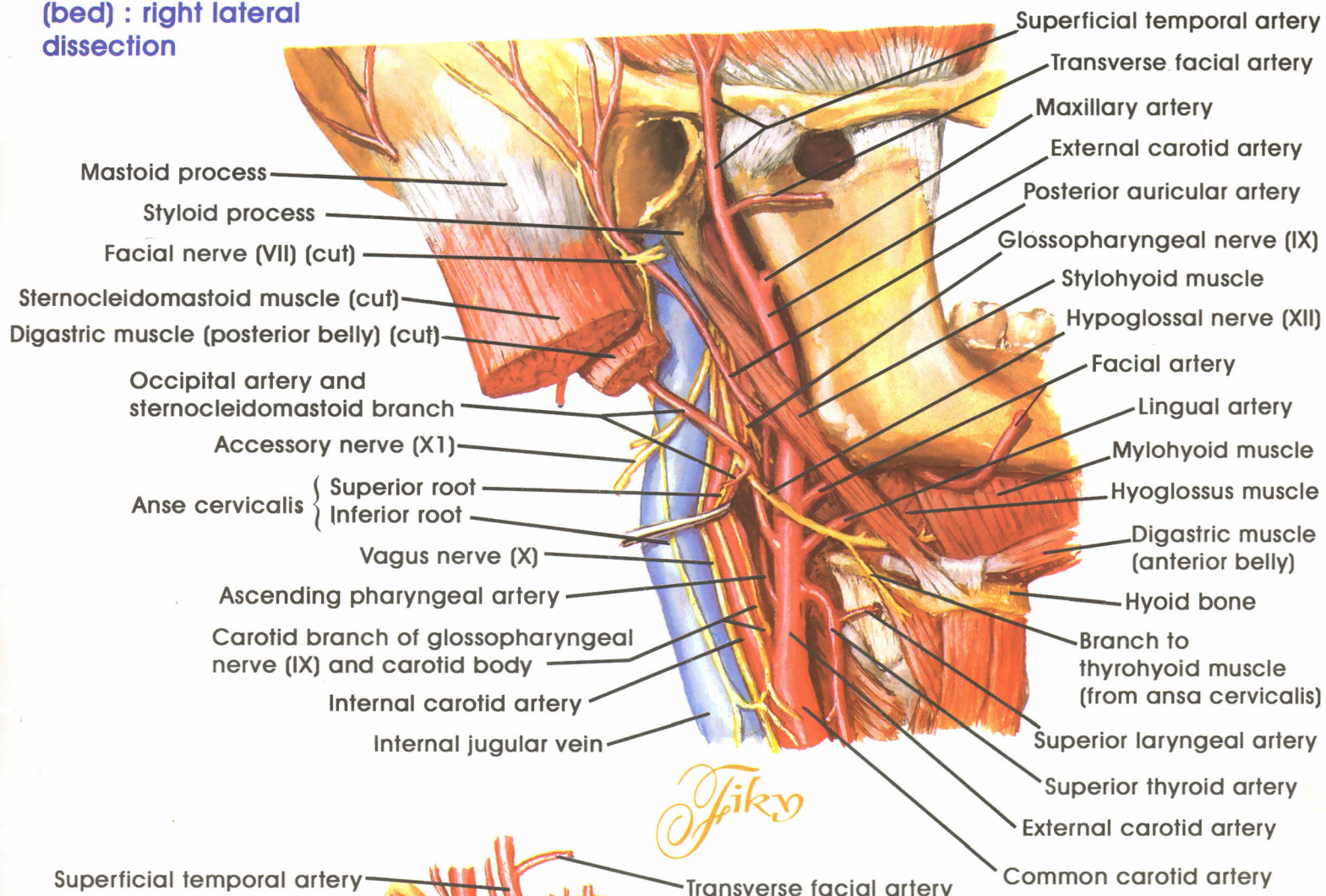


Right lateral schematic view



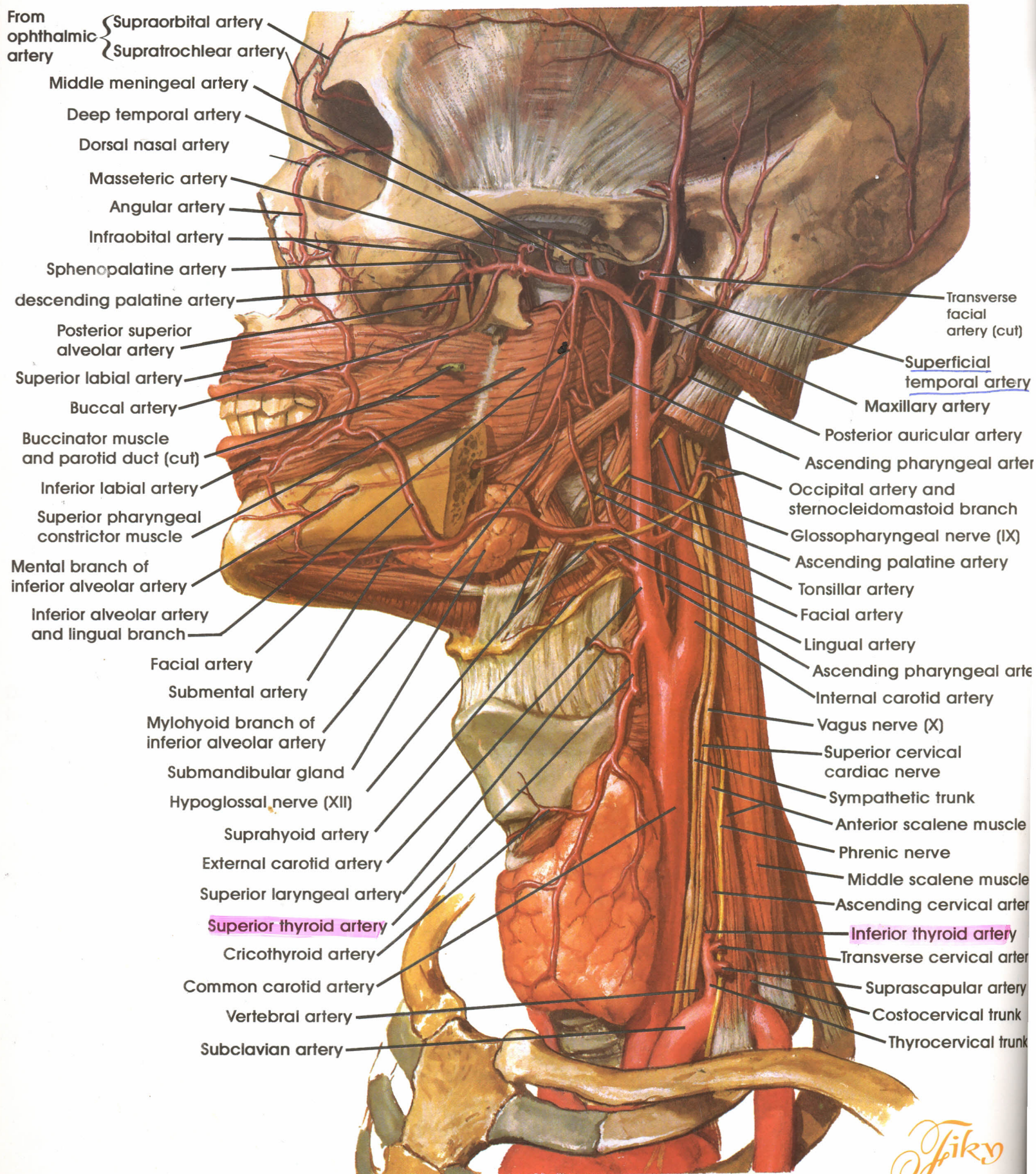
Subclavian Artery

**Parotid space
(bed) : right lateral
dissection**

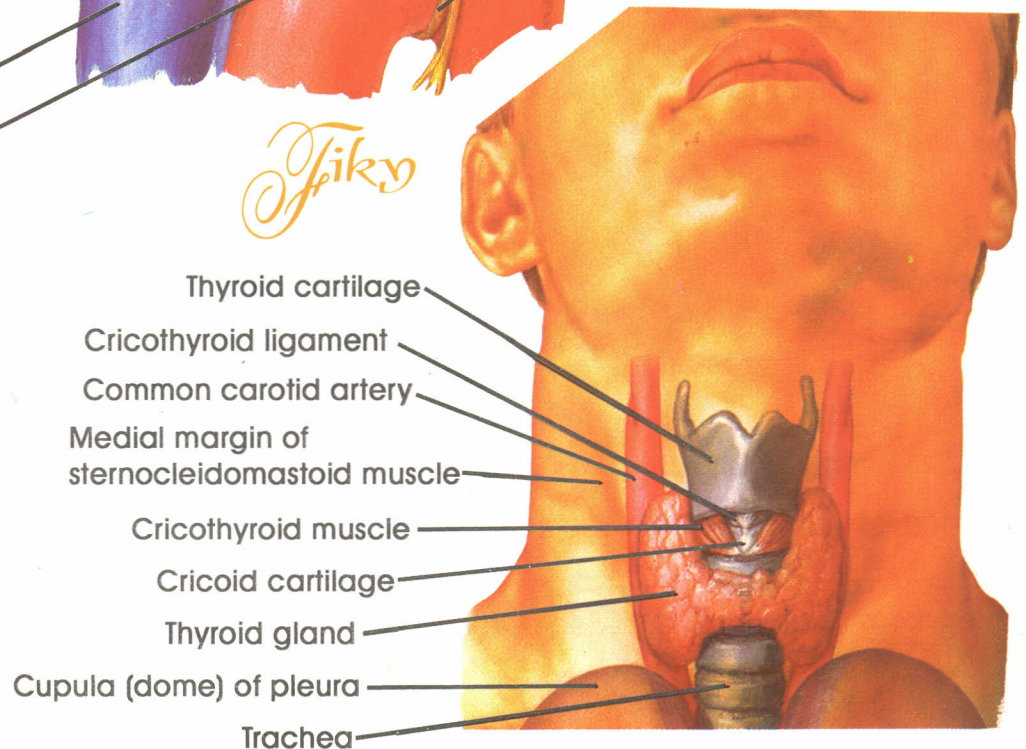
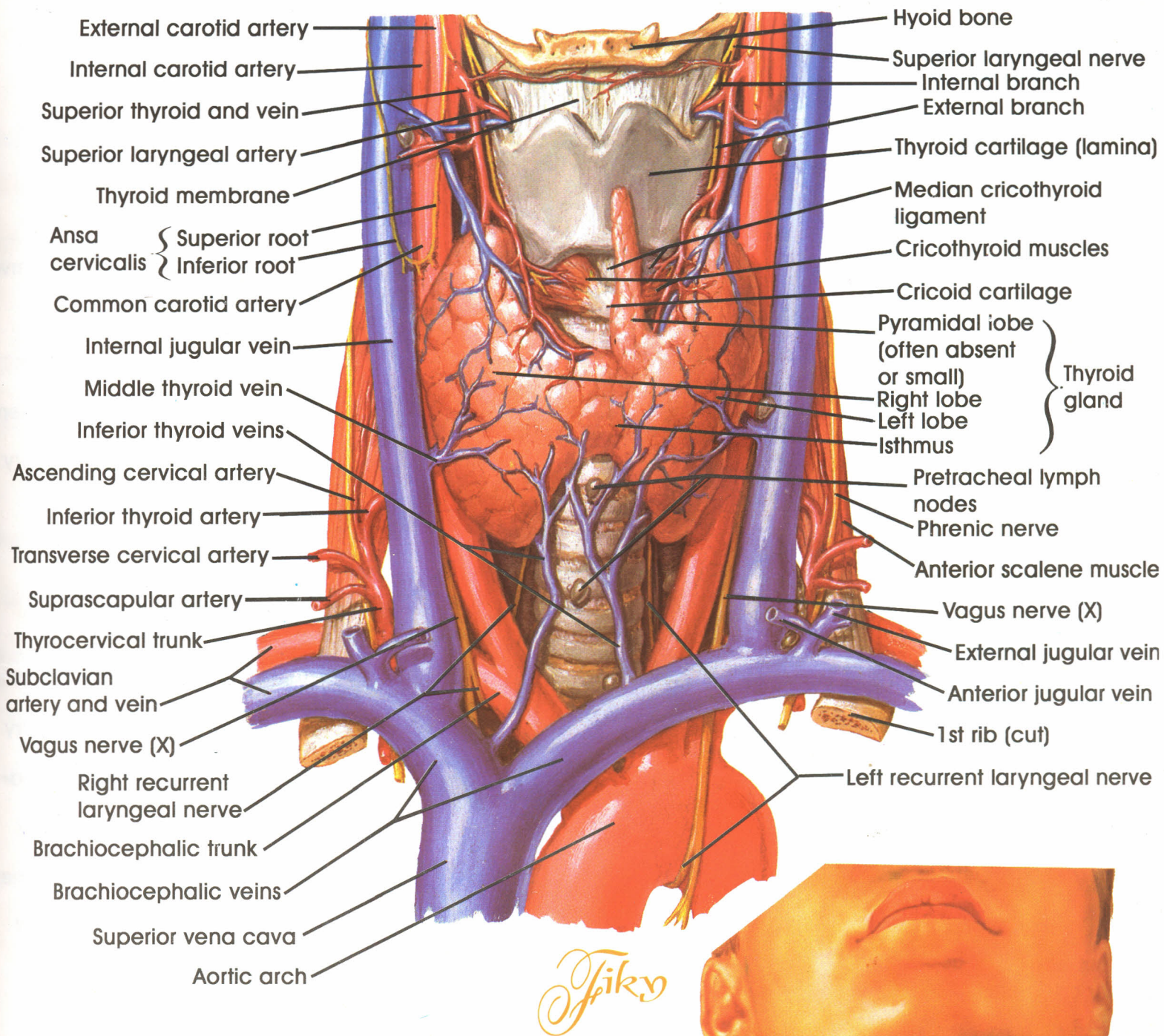


**External carotid branches:
schema**

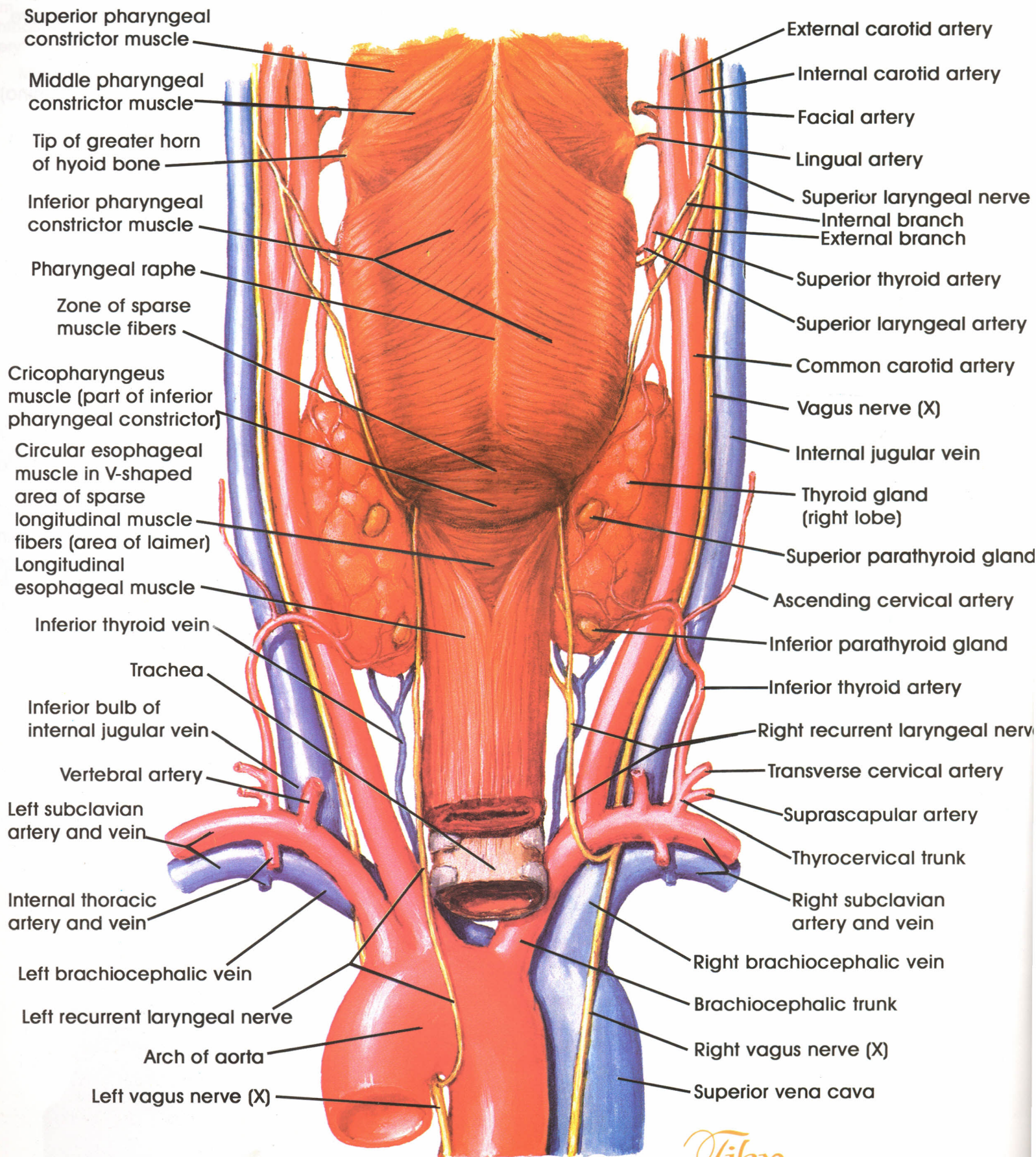
Carotid Arteries

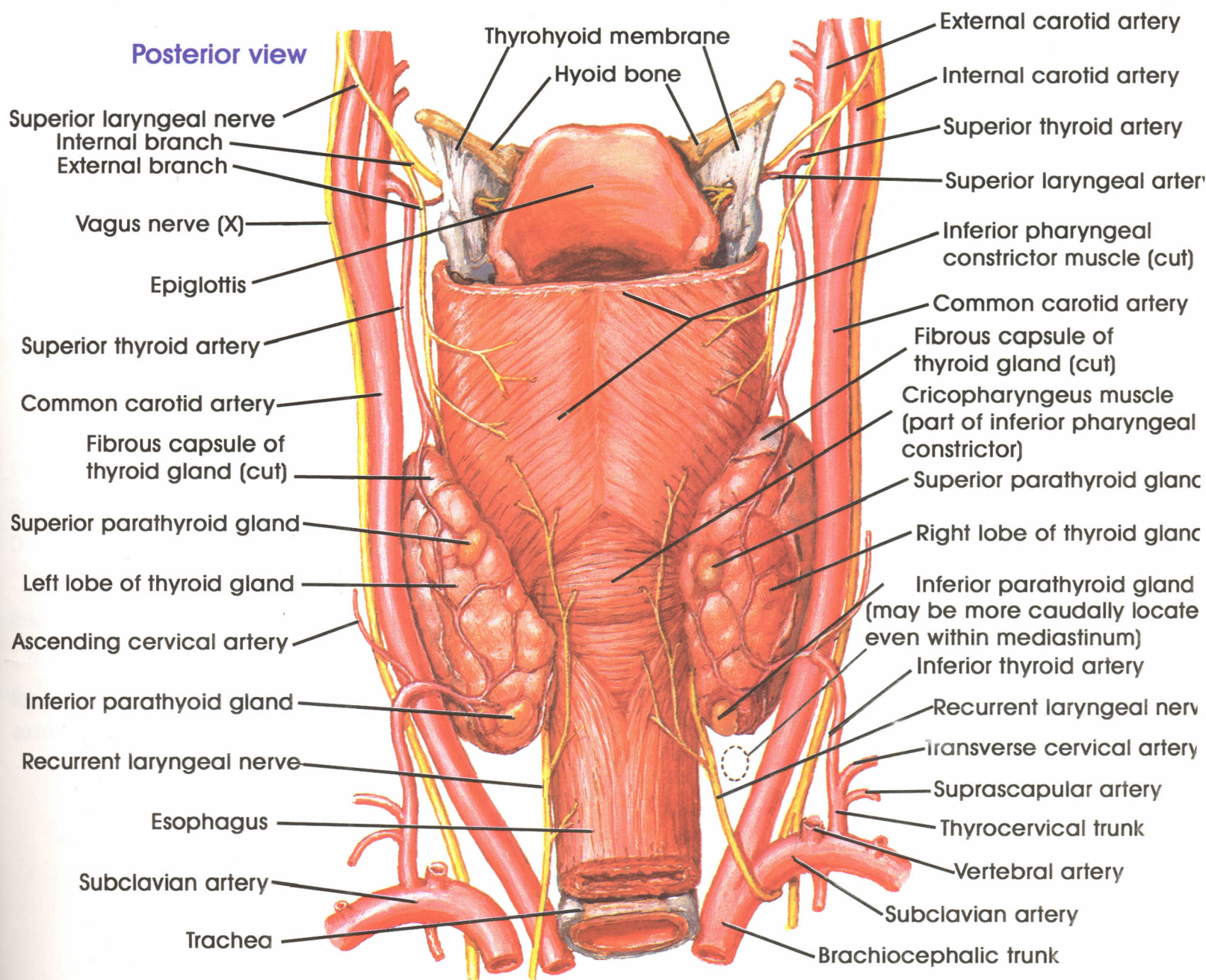


Arteries of the Head and Neck

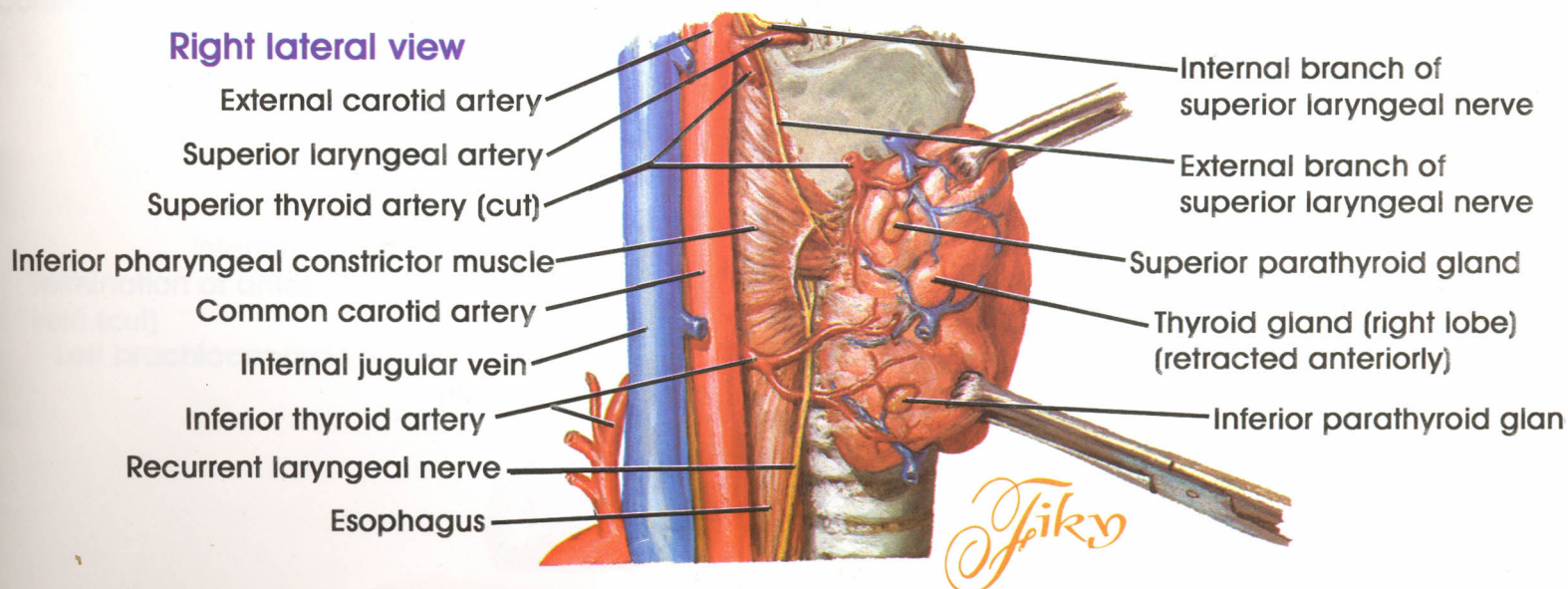


Thyroid Gland : Anterior view

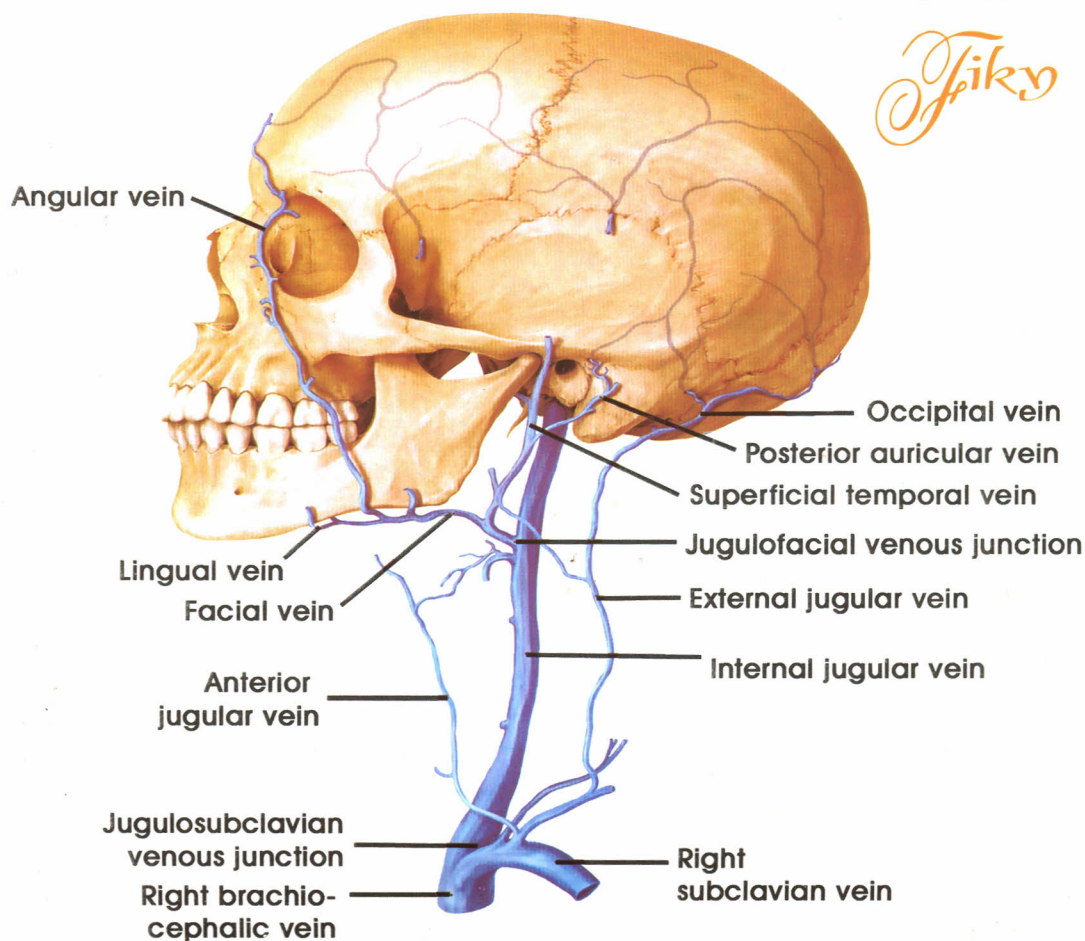
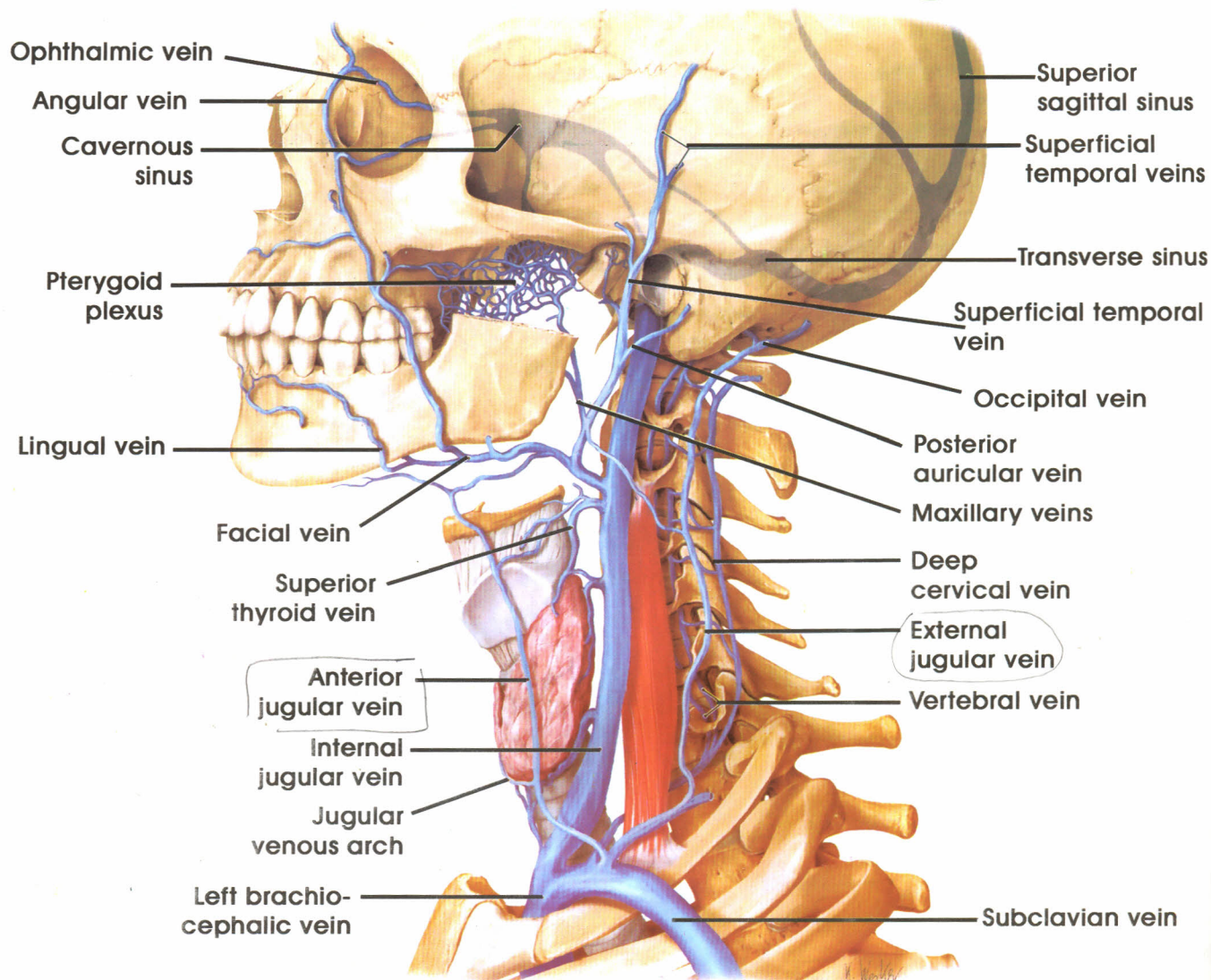




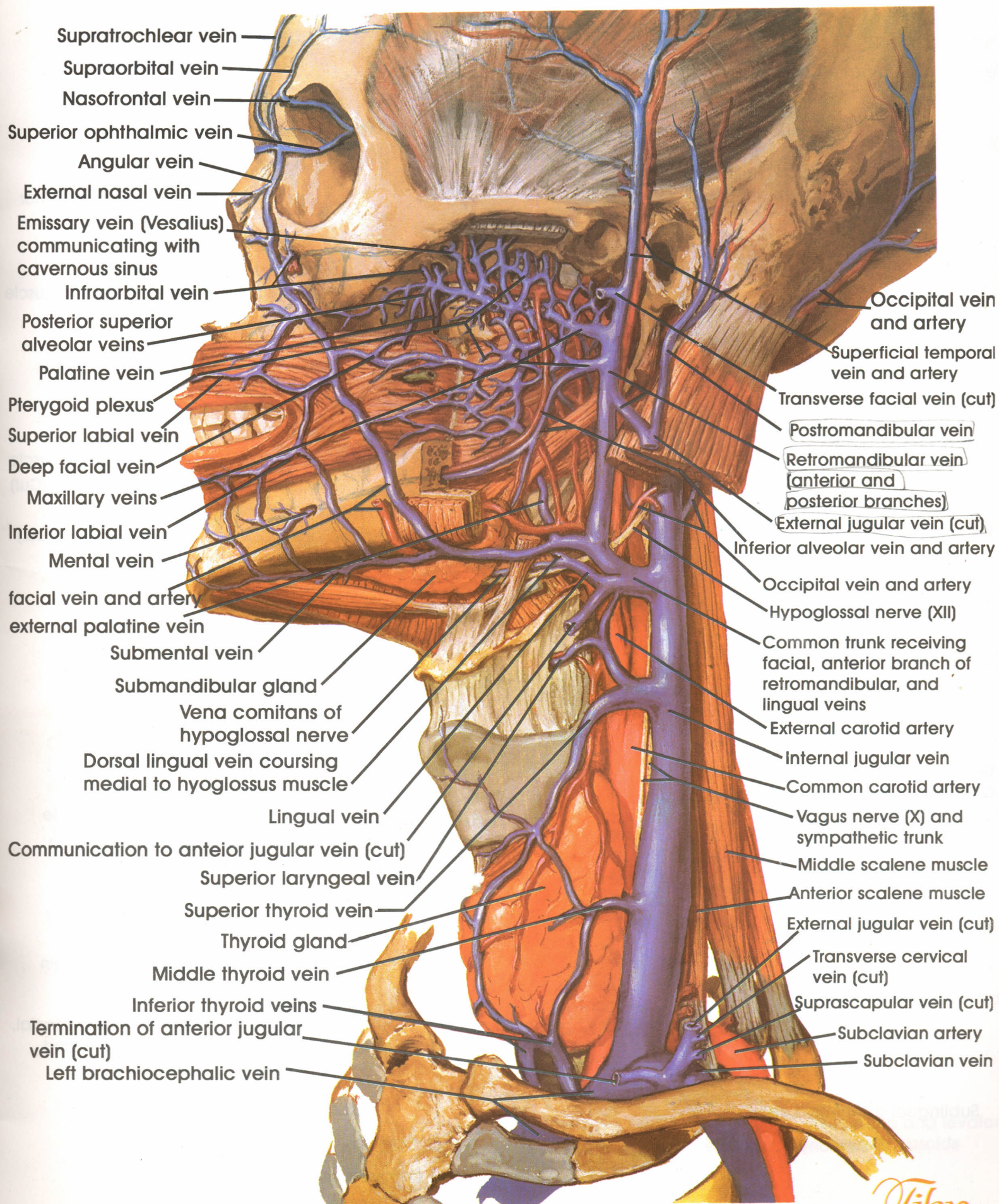
Right lateral view



Parathyroid Glands

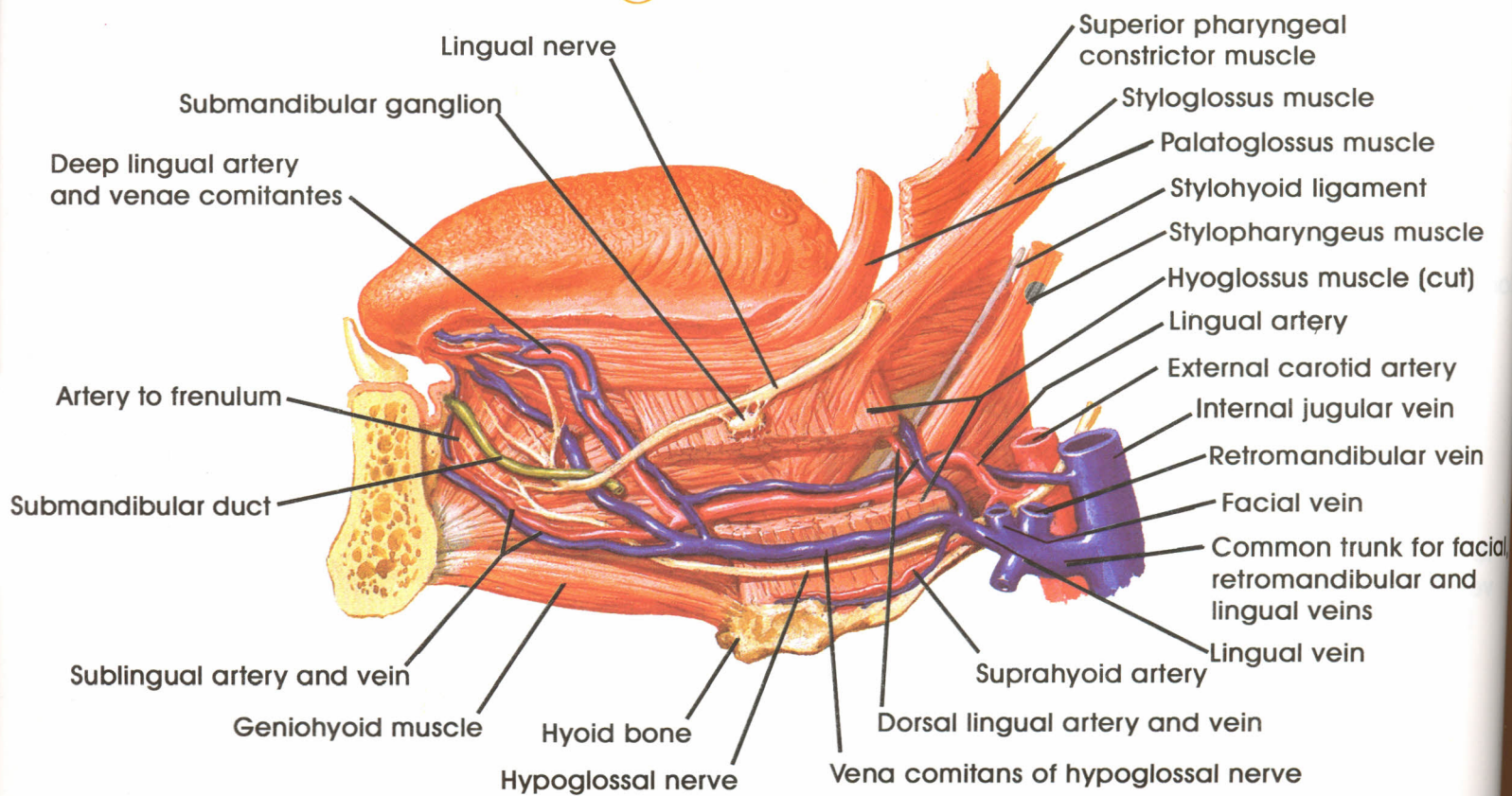
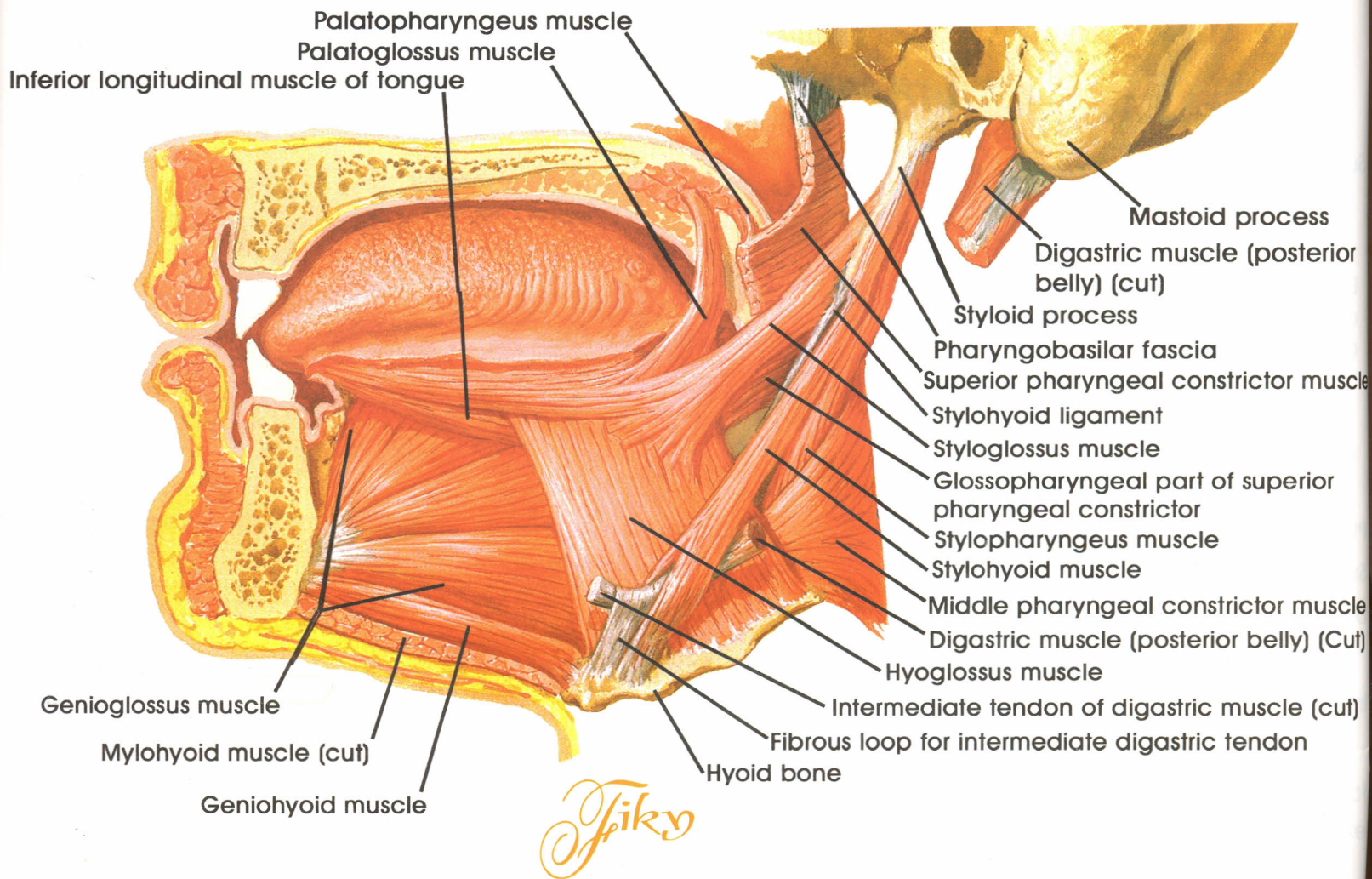


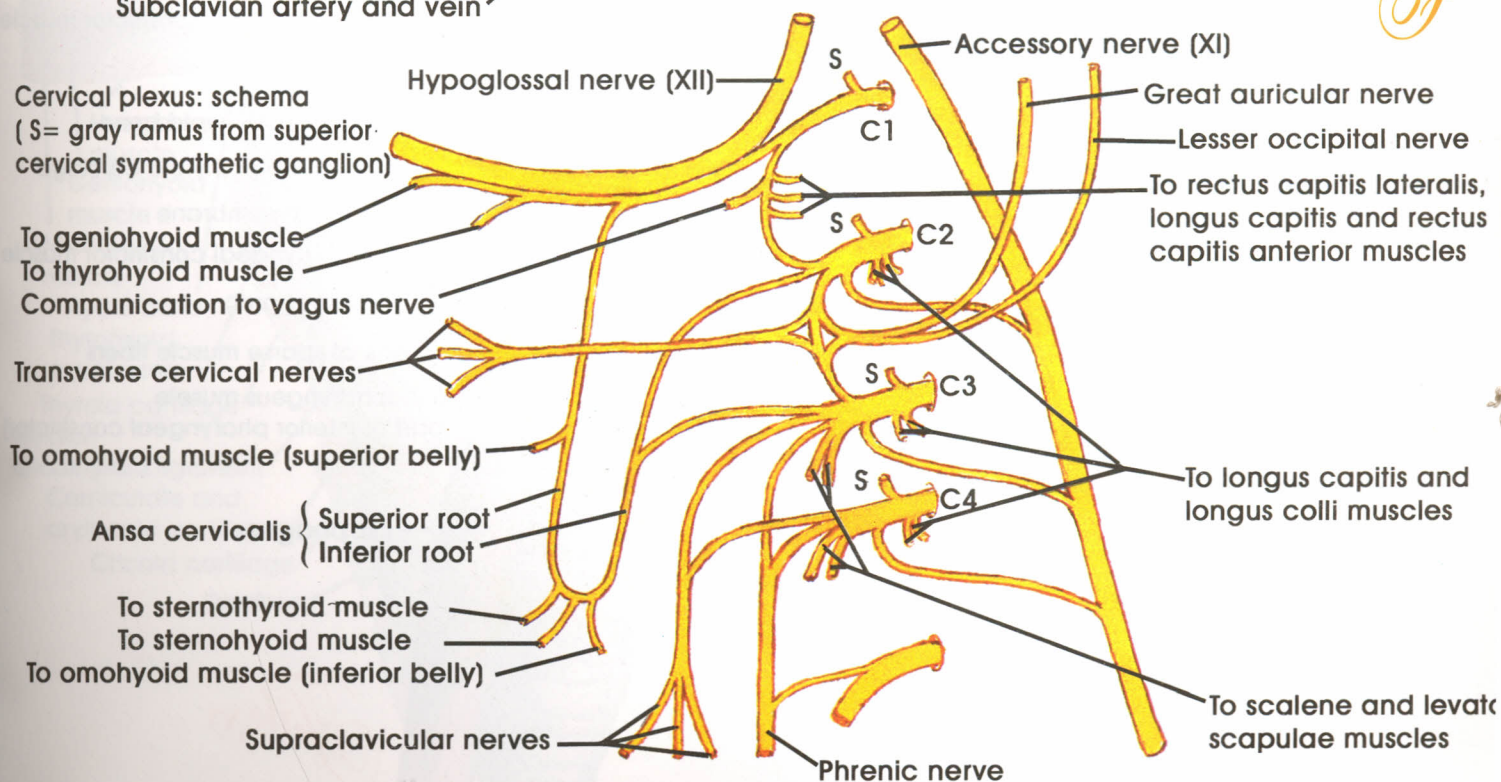
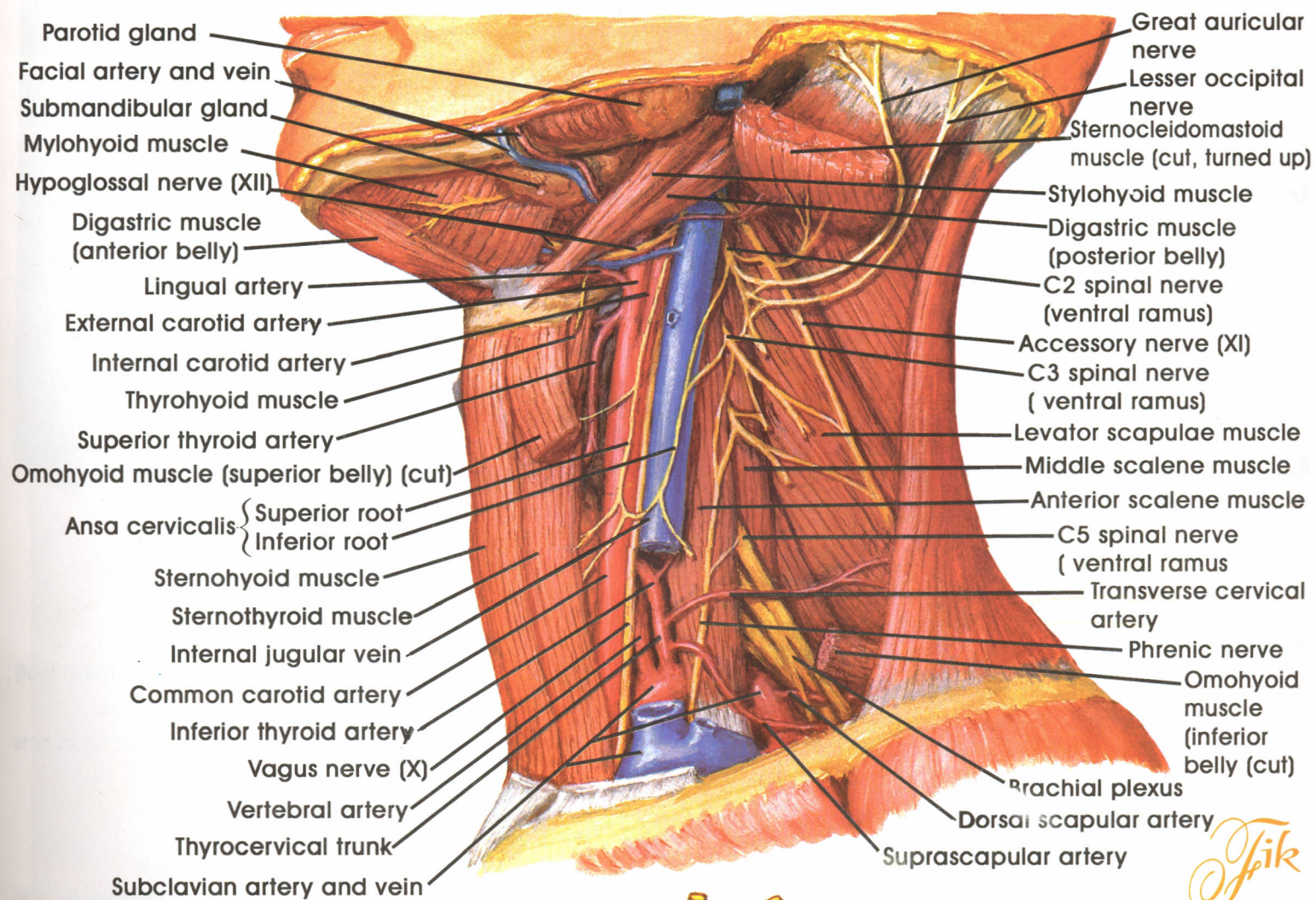
Principal Venous trunks in the Neck



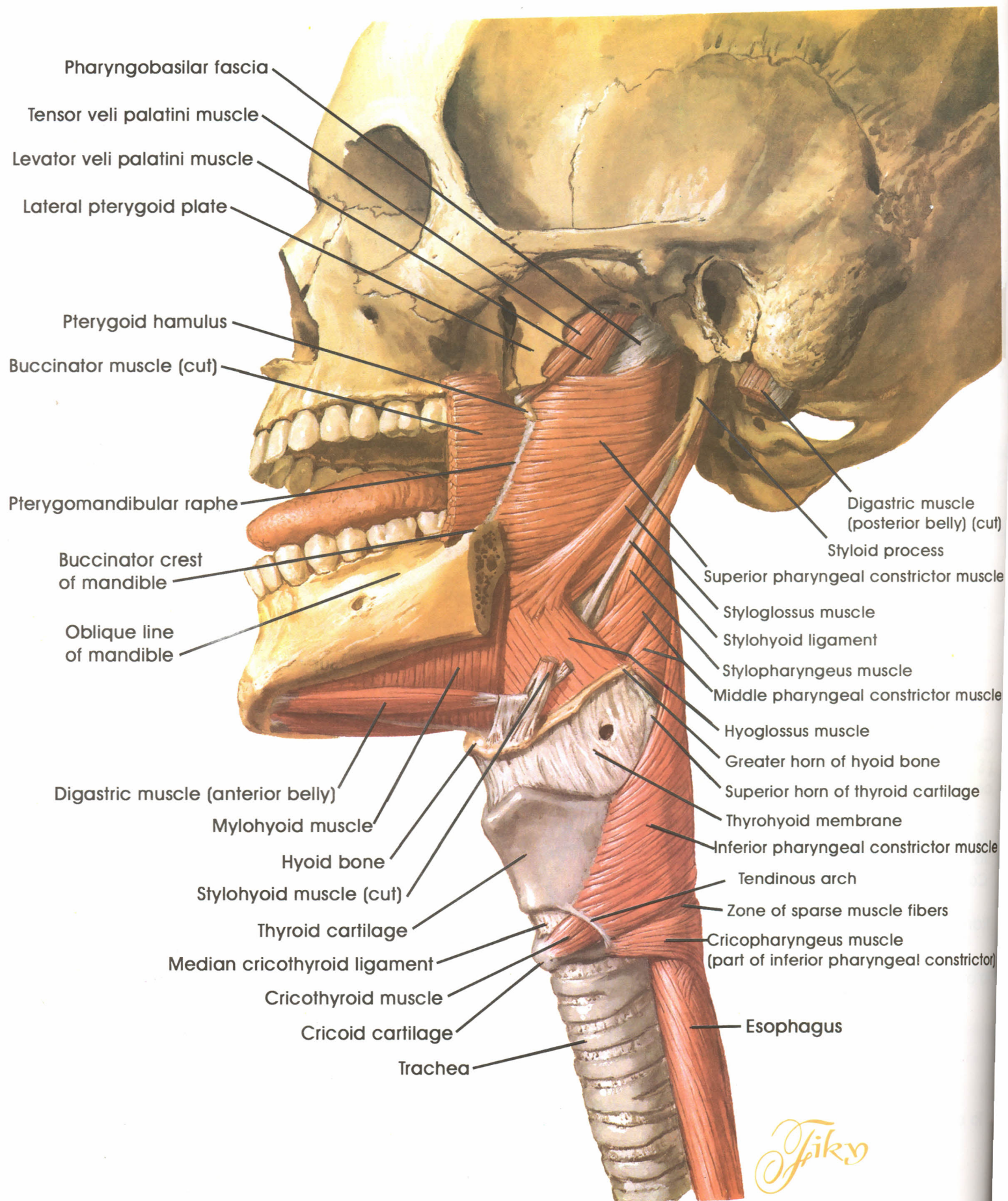
Tricky

Veins of Oral and Pharyngeal Regions

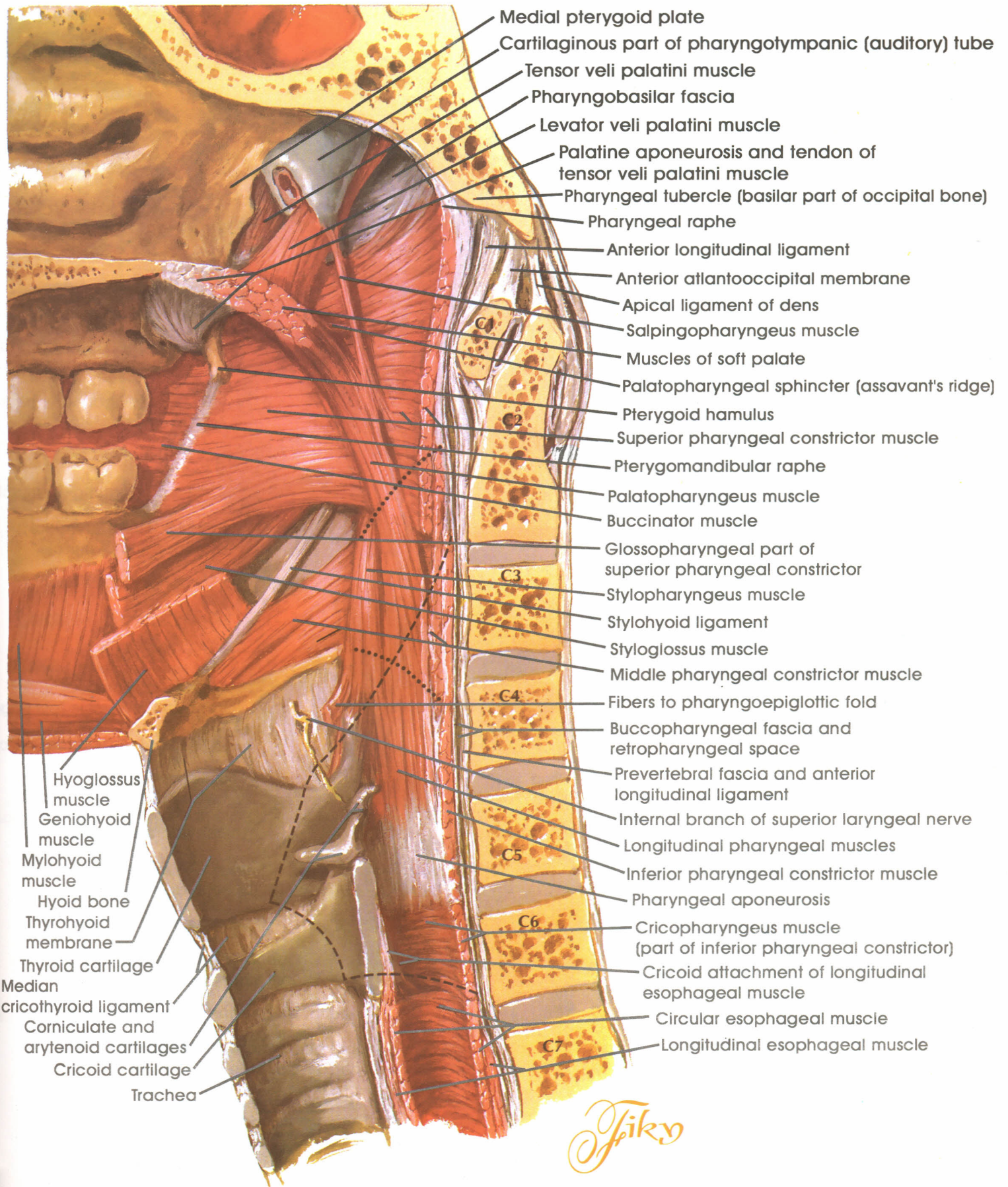




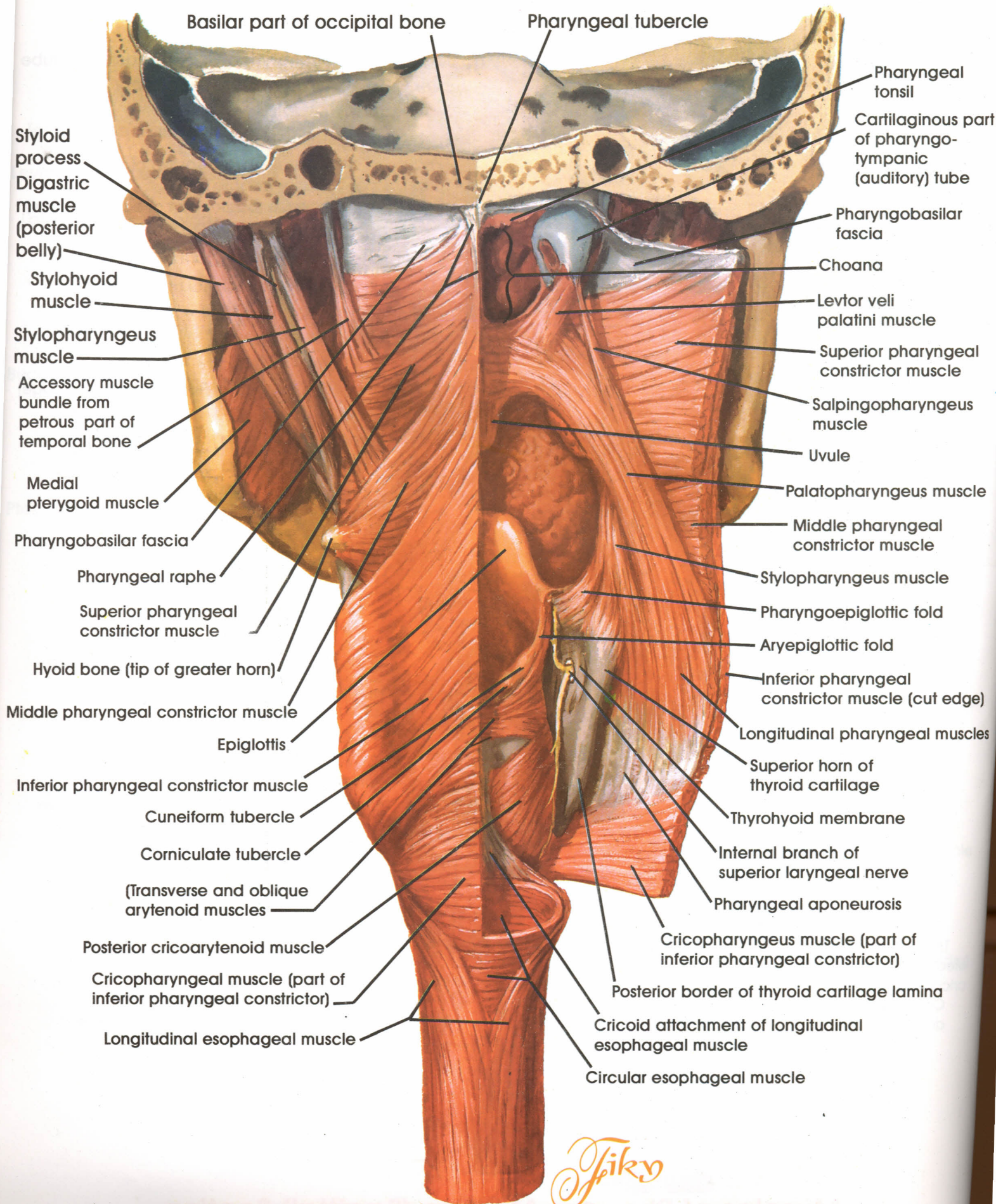
Cervical plexus in situ

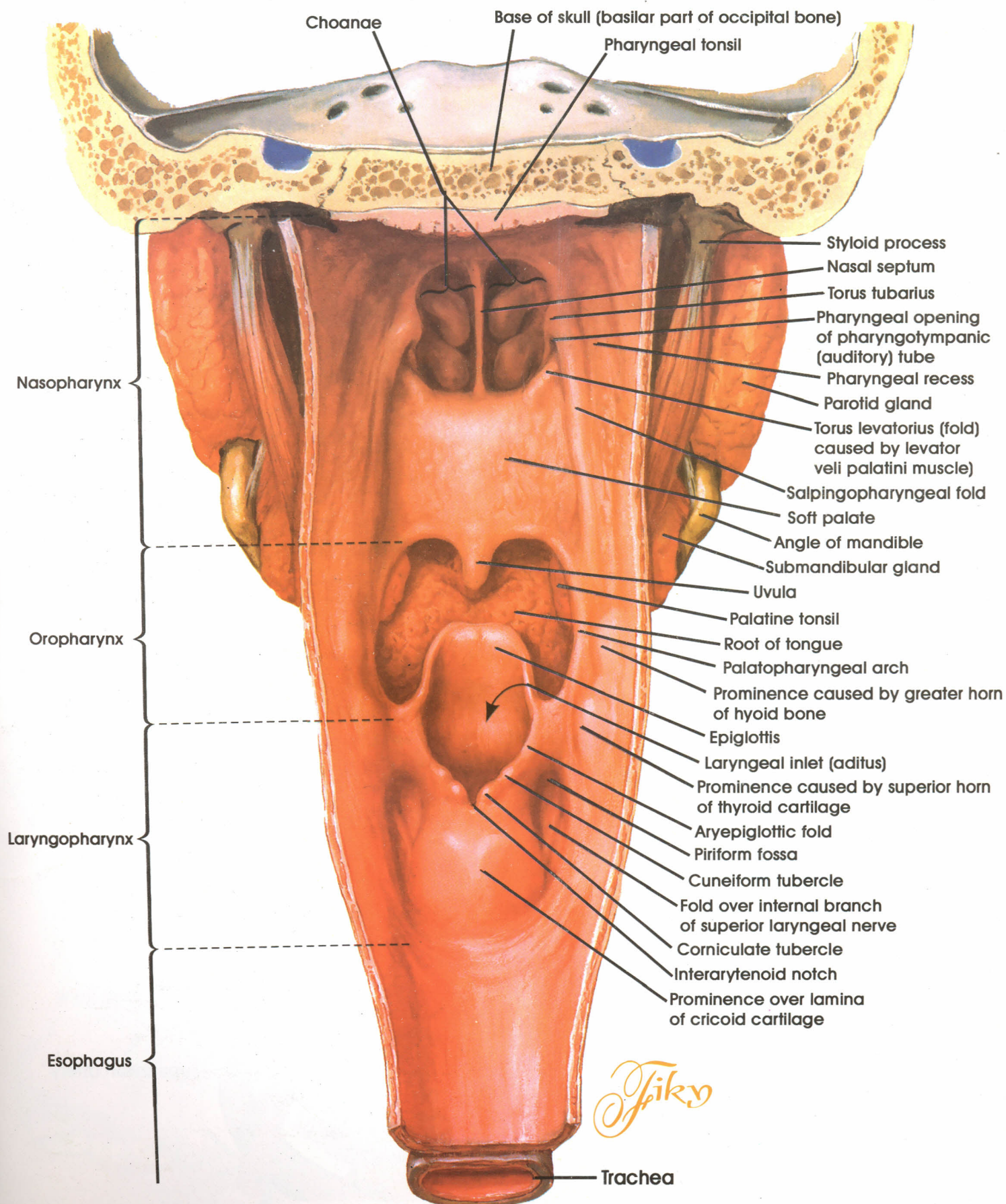


Muscles of Pharynx: Lateral View

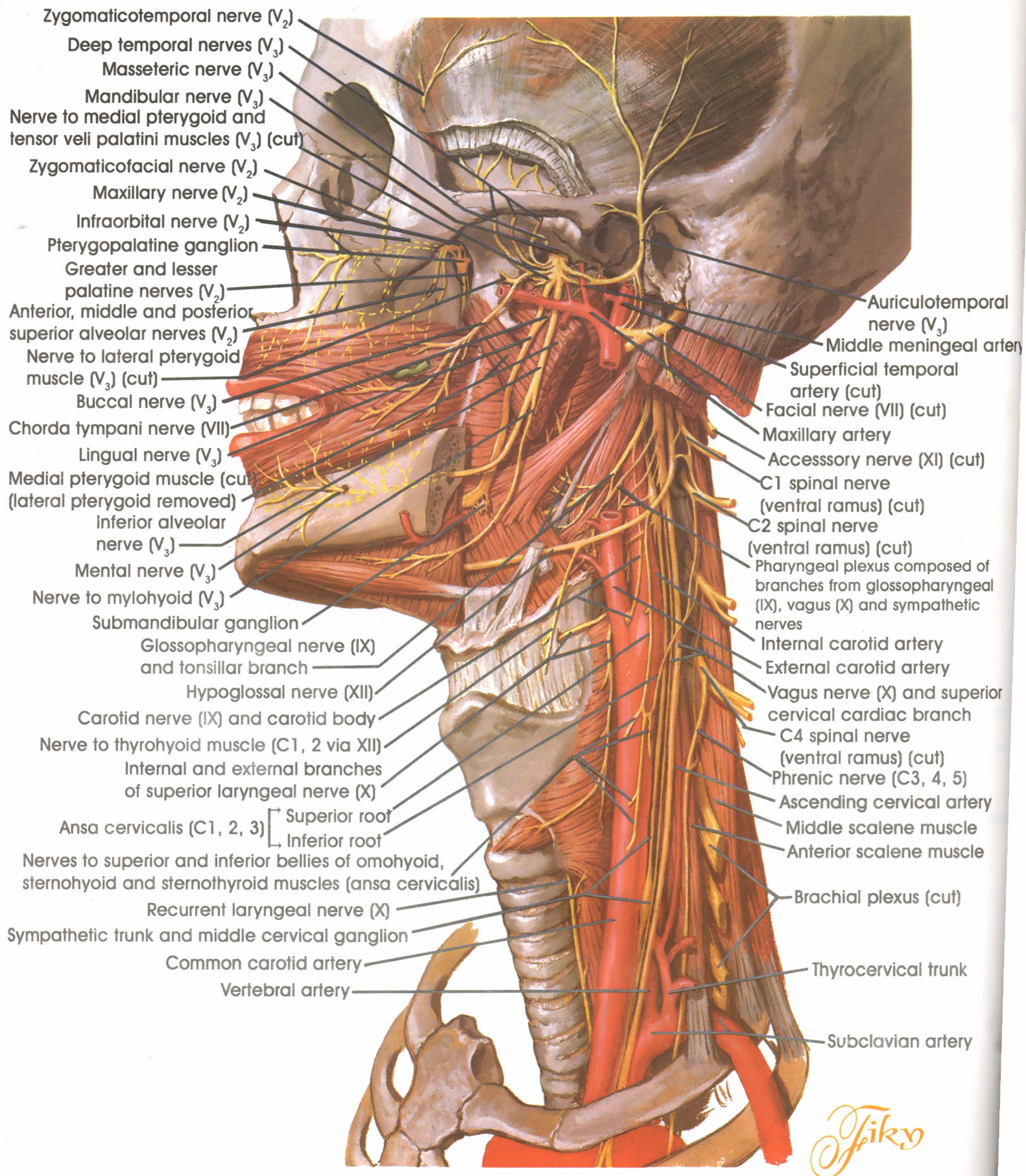


Muscles of Pharynx: Median (Sagittal) Section

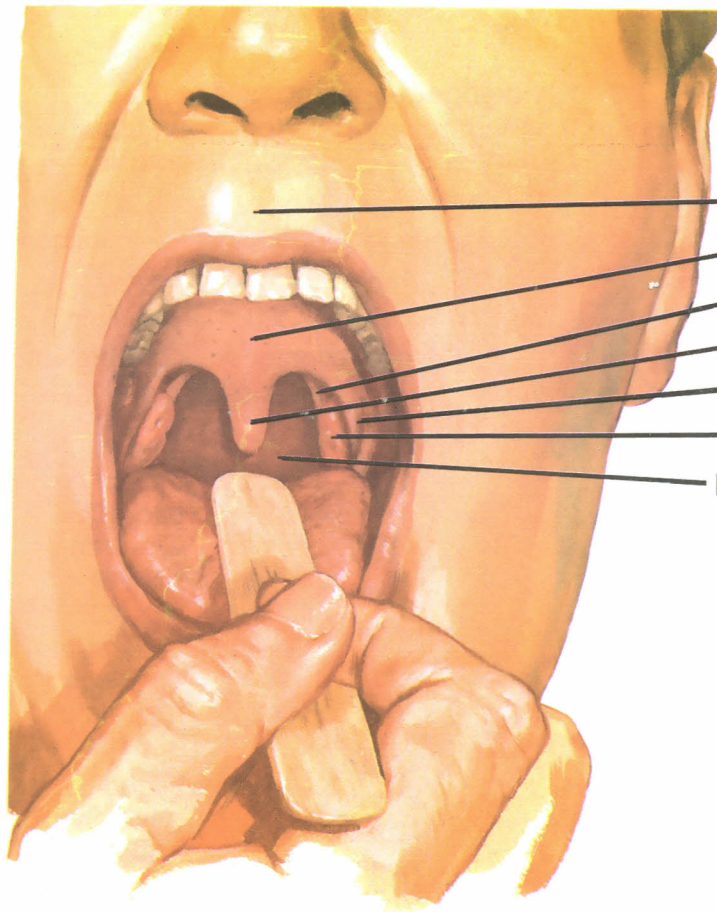




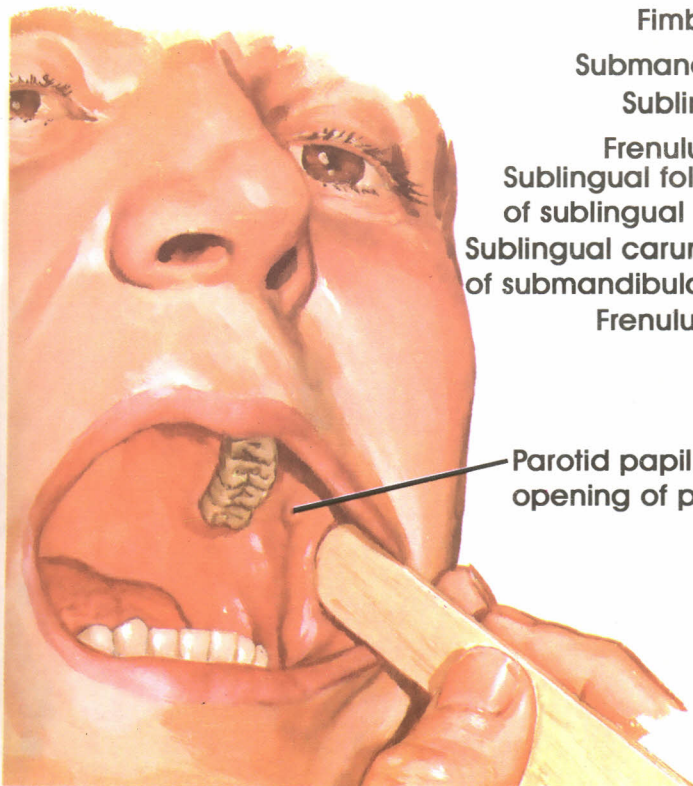
Pharynx: Opened Posterior View



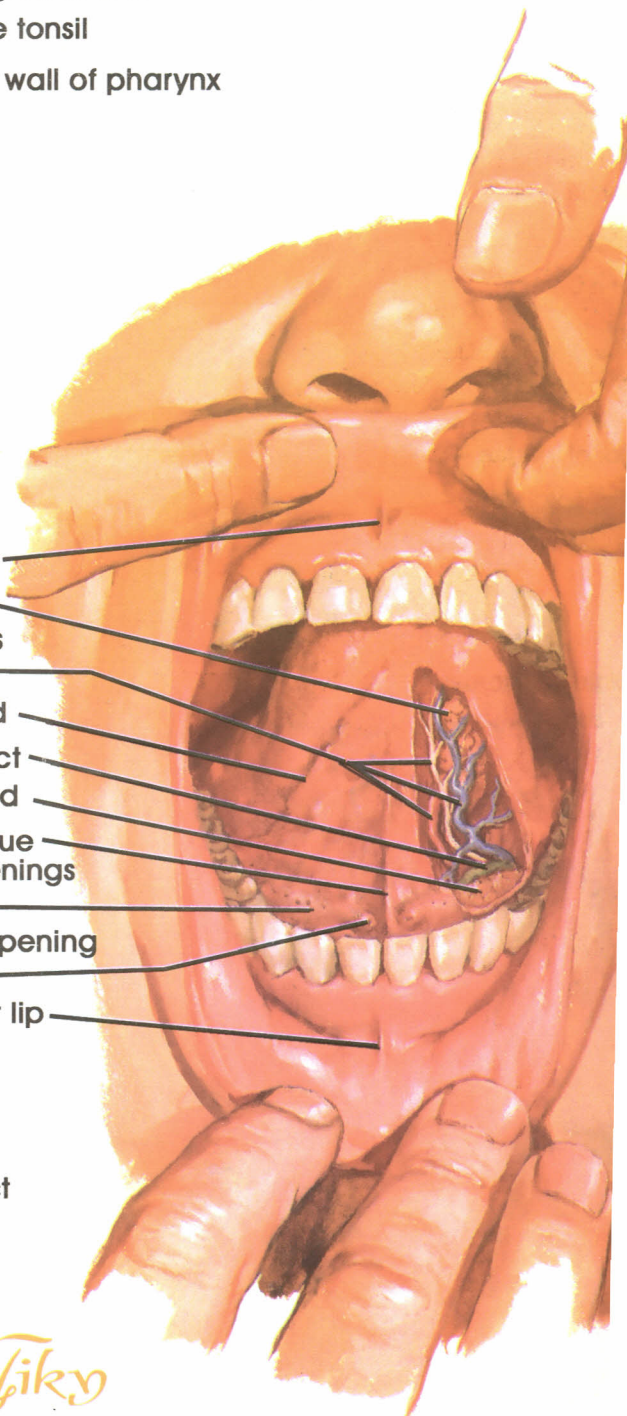
Nerves of Oral and Pharyngeal Regions



- Philtrum of lip
- Soft palate
- Palatopharyngeal arch
- Uvula
- Palatoglossal arch
- Palatine tonsil
- Posterior wall of pharynx

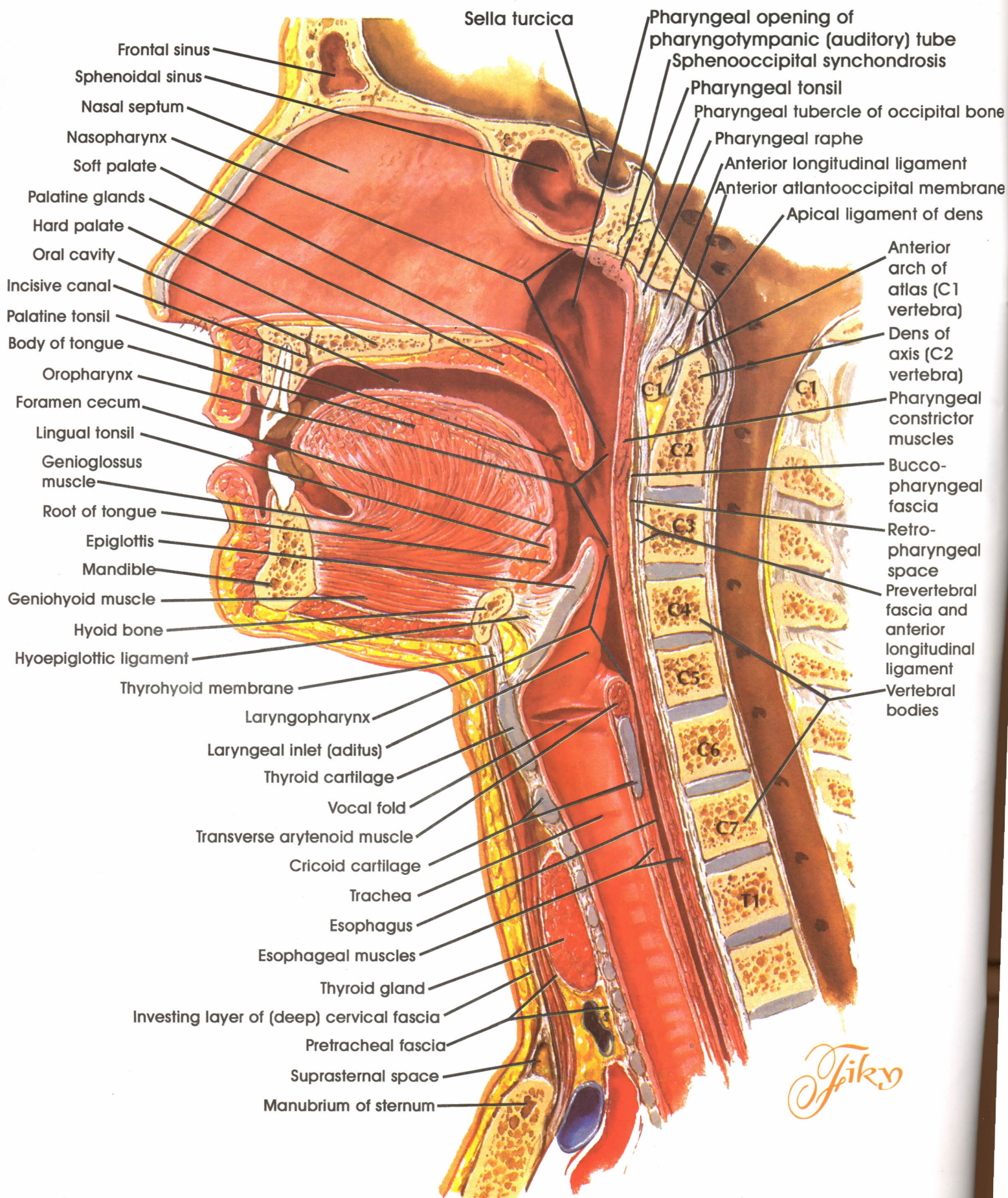


- Frenulum of upper lip
- Lingual minor salivary gland
- Deep lingual artery and veins and lingual nerve
- Fimbriated fold
- Submandibular duct
- Sublingual gland
- Frenulum of tongue
- Sublingual fold with openings of sublingual ducts
- Sublingual caruncle with opening of submandibular duct
- Frenulum of lower lip
- Parotid papilla with opening of parotid duct

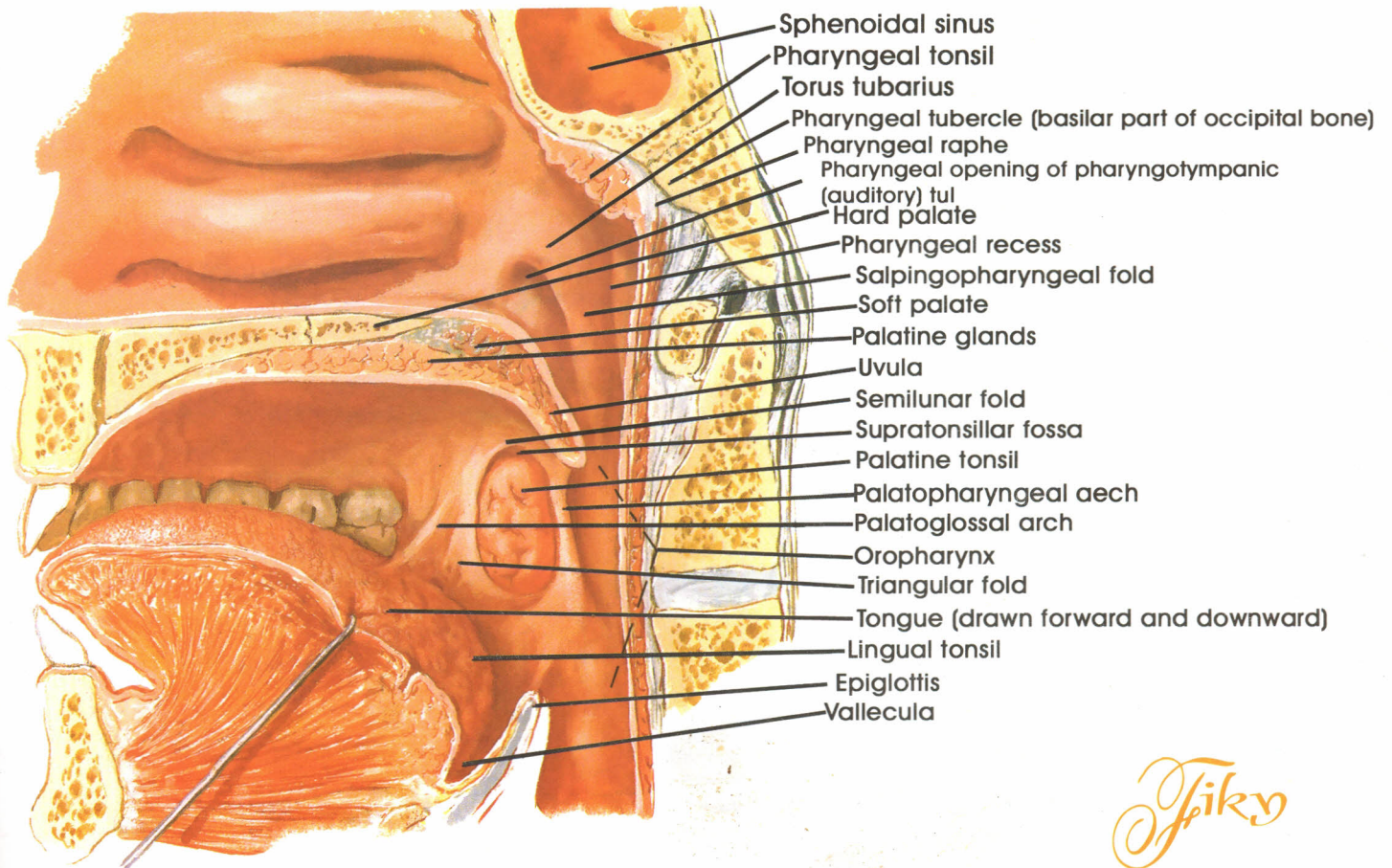


Spiky

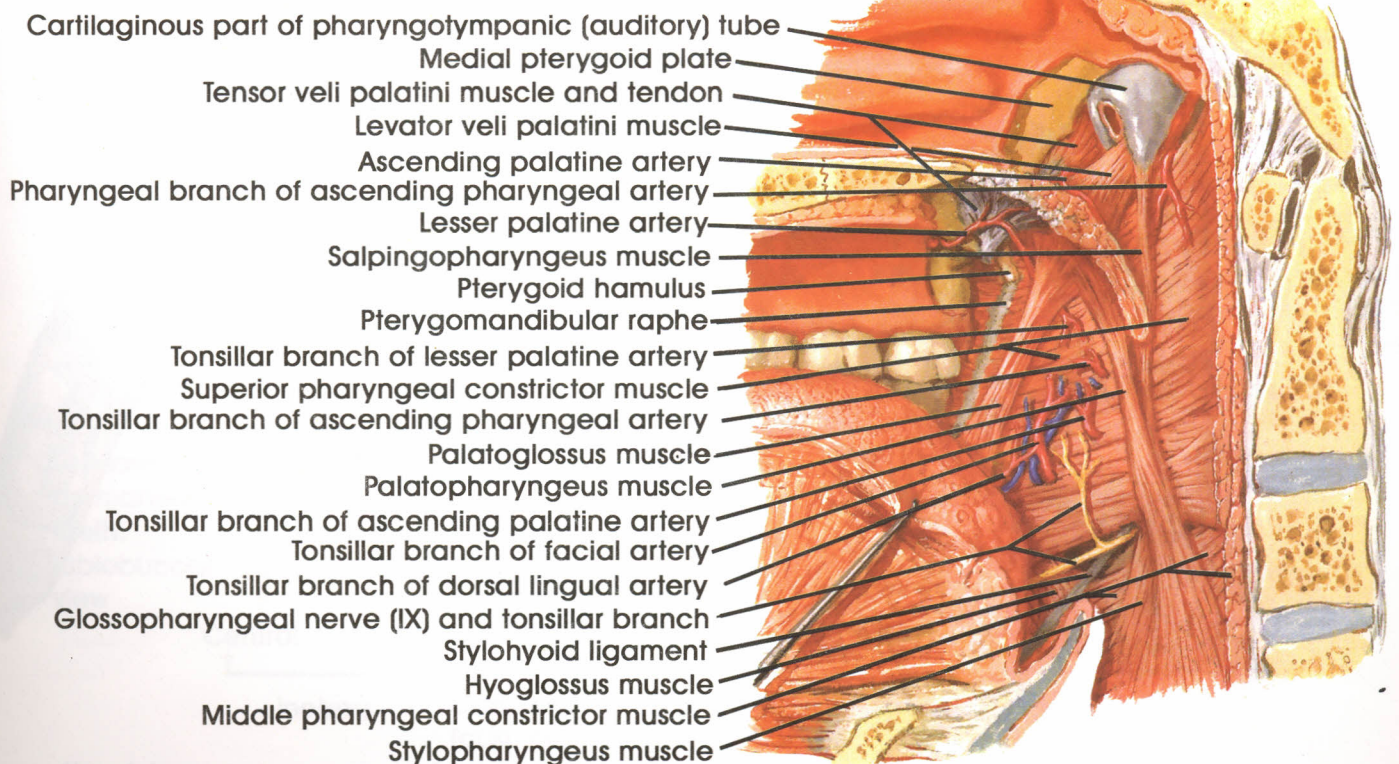
Inspection of Oral Cavity



Pharynx: Median Section



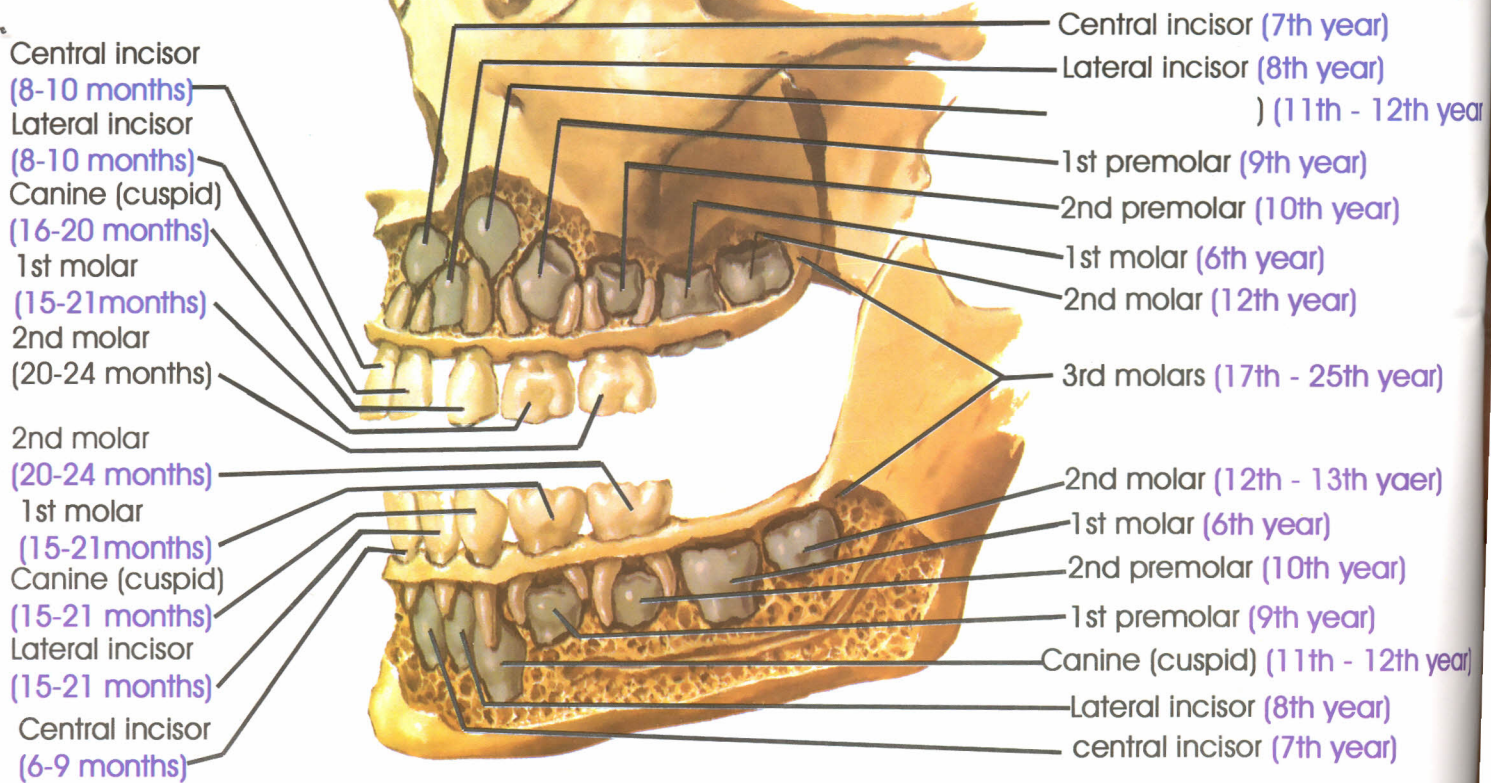
Pharyngeal mucosa removed



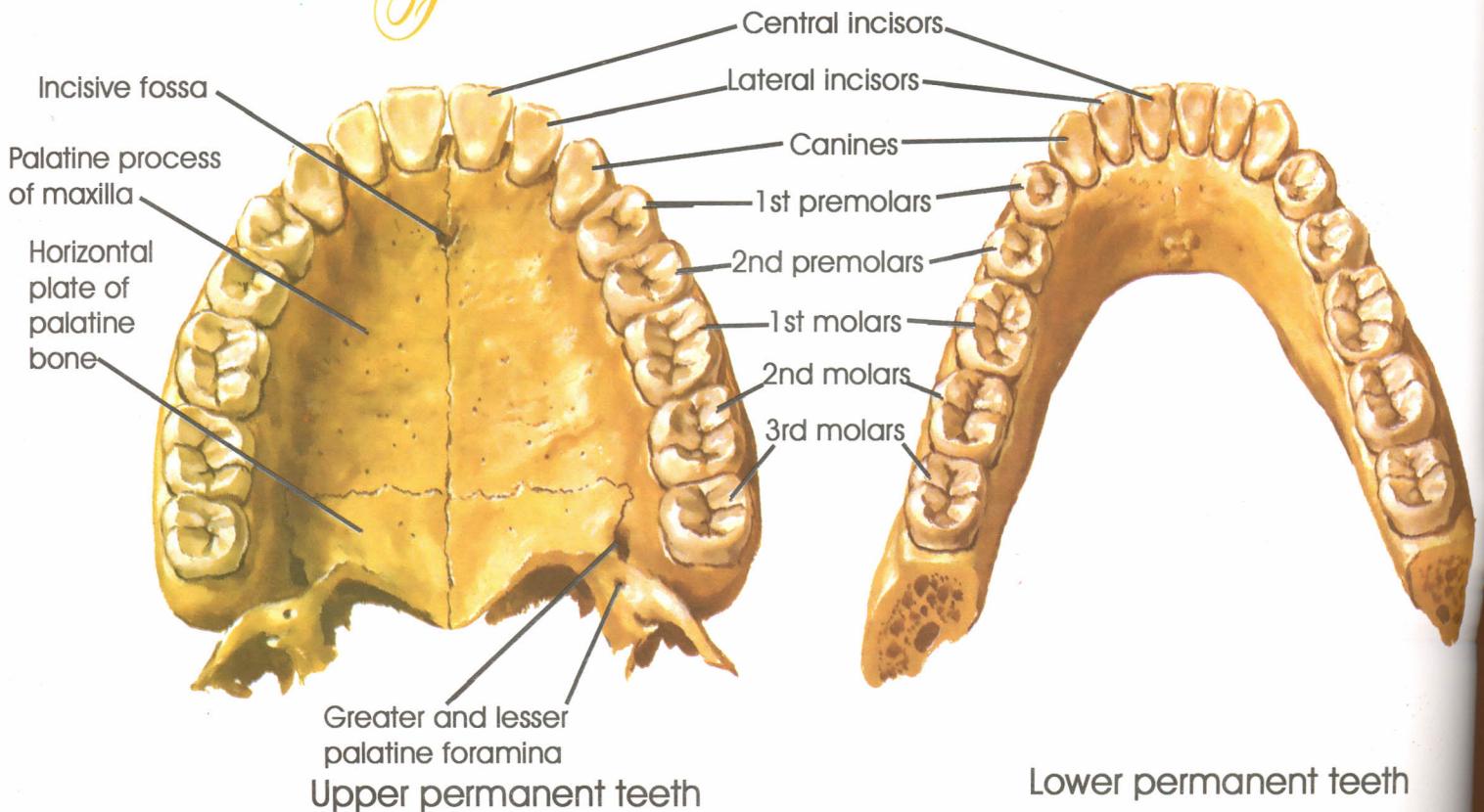
Fauces

Deciduous
(primary)
Usual age of
eruption

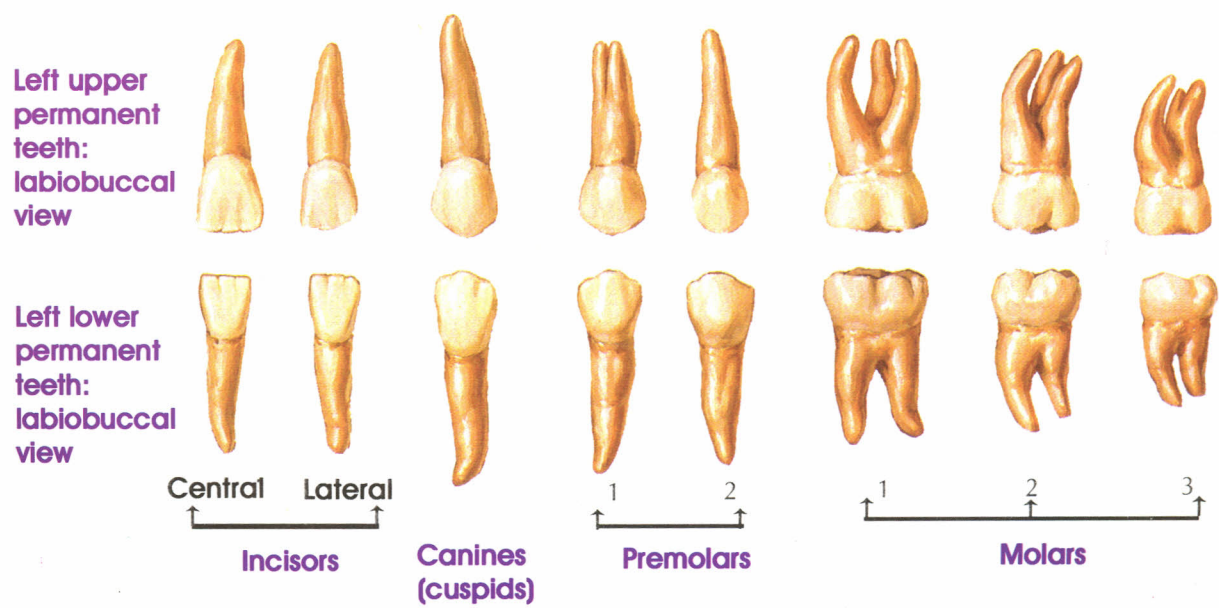
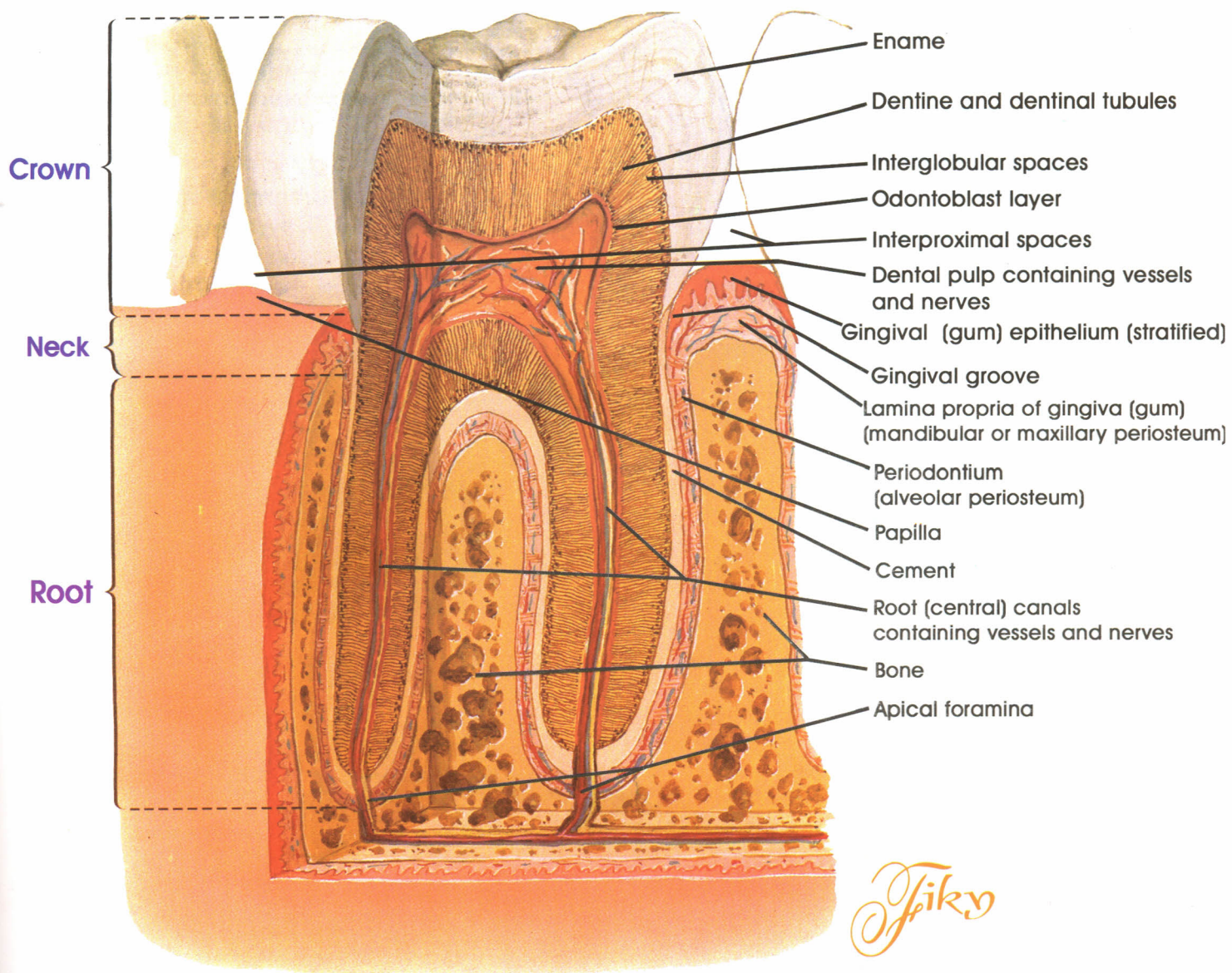
Permanent
(colored blue)
Usual age of
eruption



Spiky

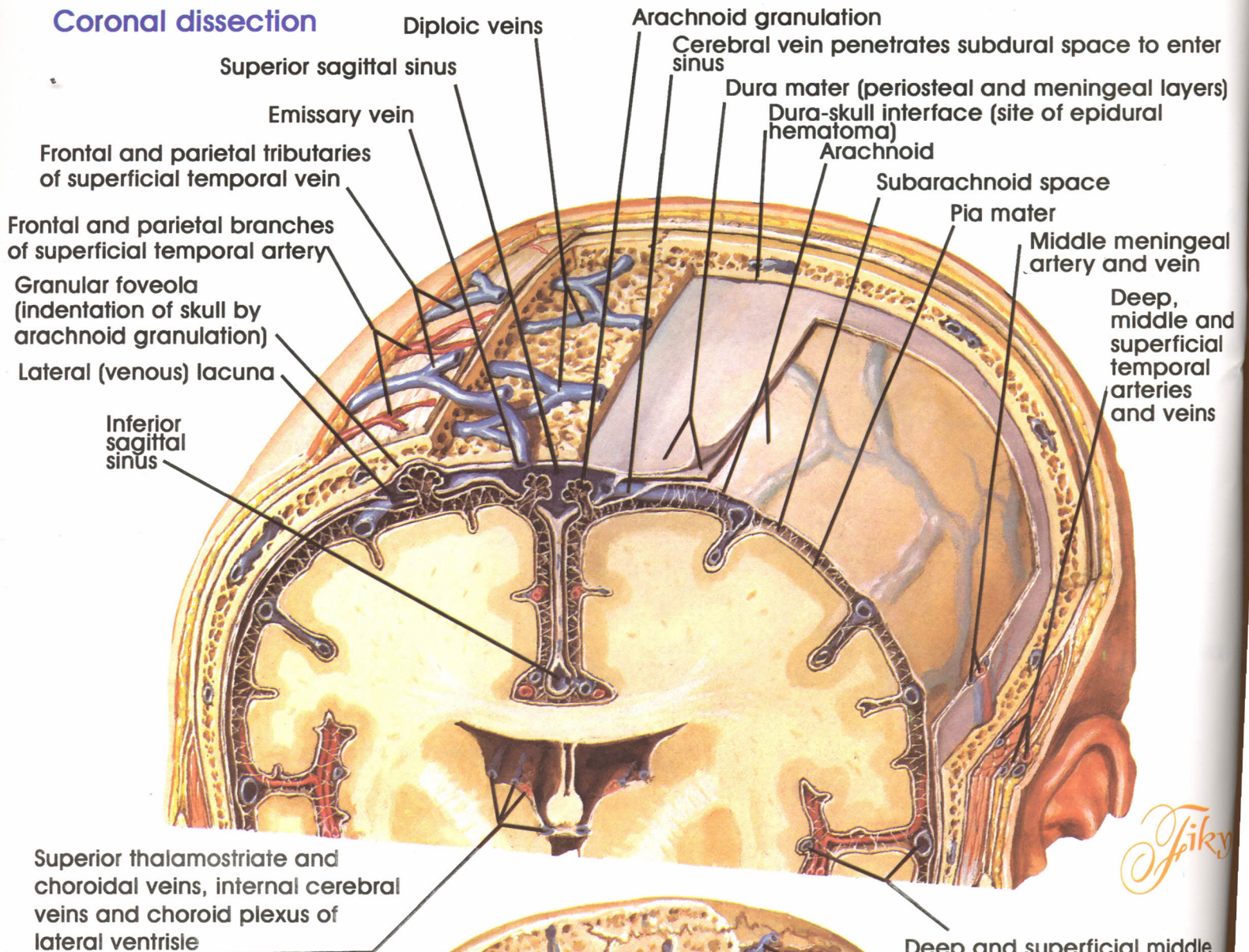


Teeth

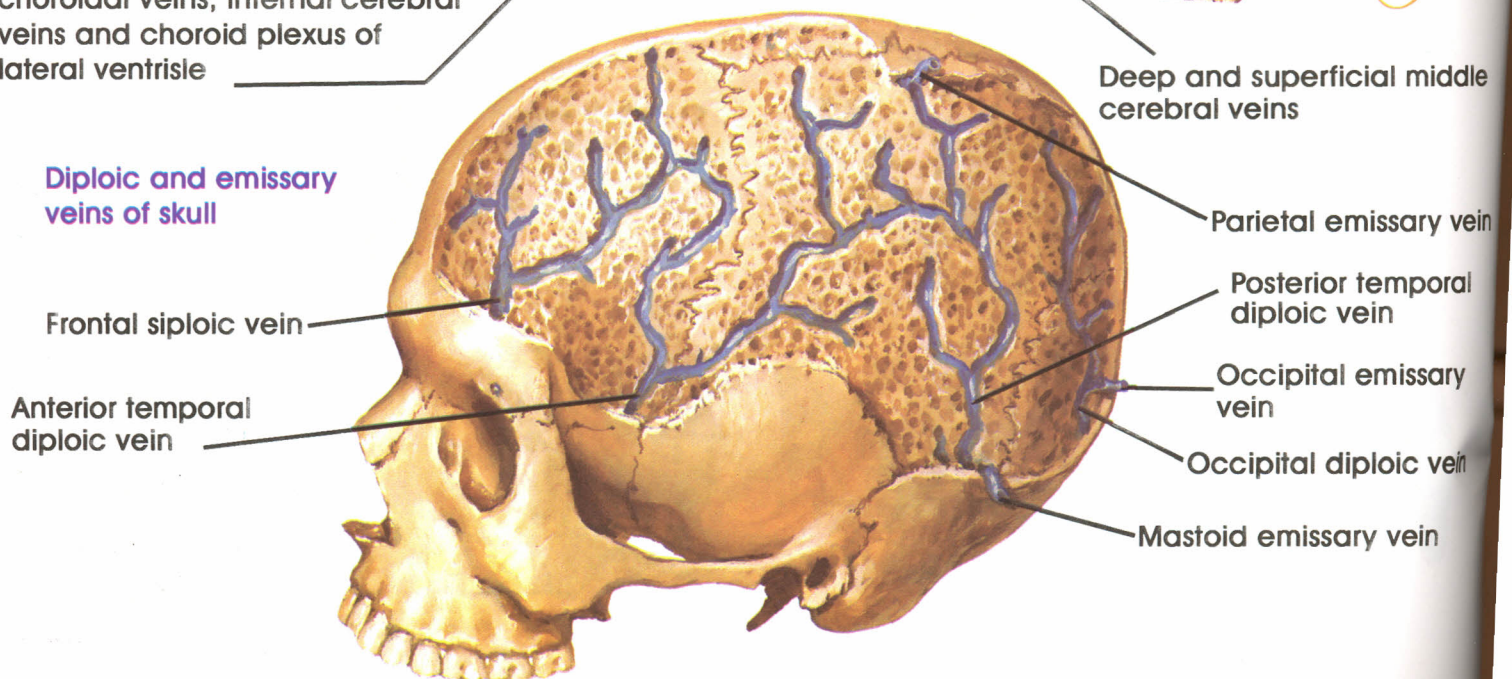


Teeth (continued)

Coronal dissection



Diploic and emissary veins of skull



Meninges and Diploic Veins

Frontal (anterior) and parietal (posterior) branches of middle meningeal artery

Middle meningeal artery

Anterior meningeal branch of anterior ethmoidal artery

Arachnoid granulations

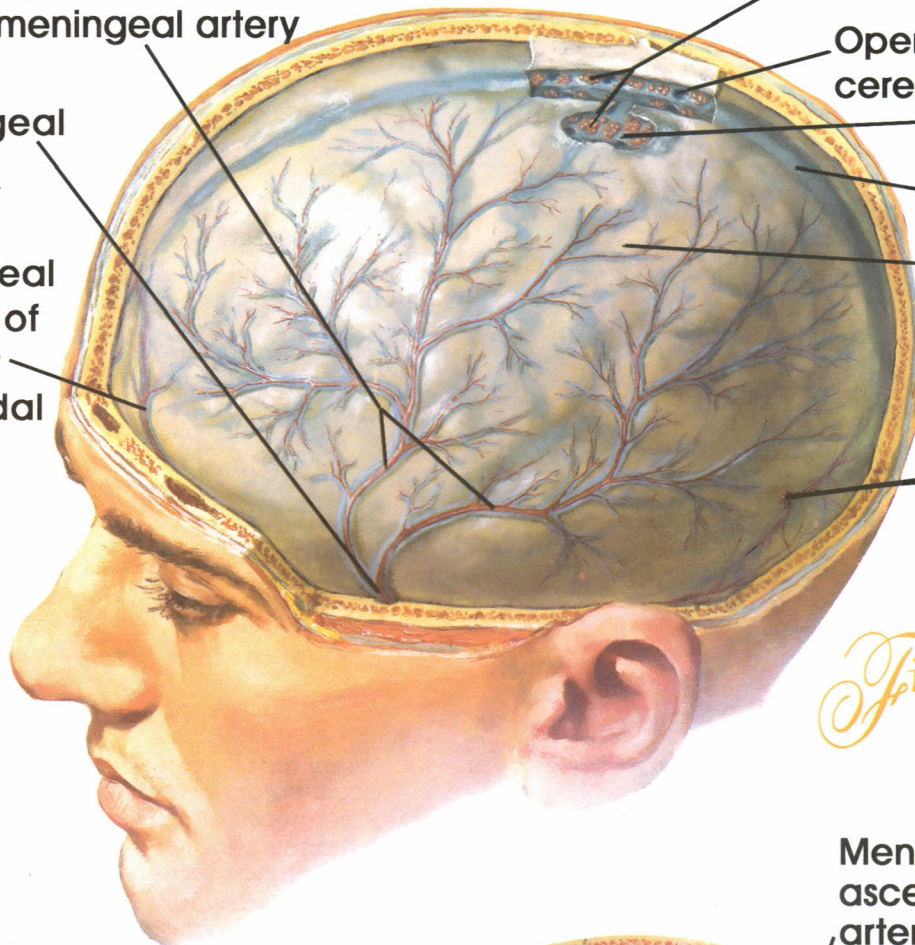
Opening of superior cerebral vein

Lateral (venous) lacuna

Superior sagittal sinus

Dura mater

Mastoid branch of occipital artery



Spiky

Middle meningeal artery

Recurrent meningeal branch of lacrimal (ophthalmic) artery

Accessory meningeal artery

Anterior meningeal branch of anterior ethmoidal artery

Posterior ethmoidal artery

Internal carotid artery and its meningo-hypophyseal trunk

Middle meningeal artery

Accessory meningeal artery

Superficial temporal artery

Maxillary artery

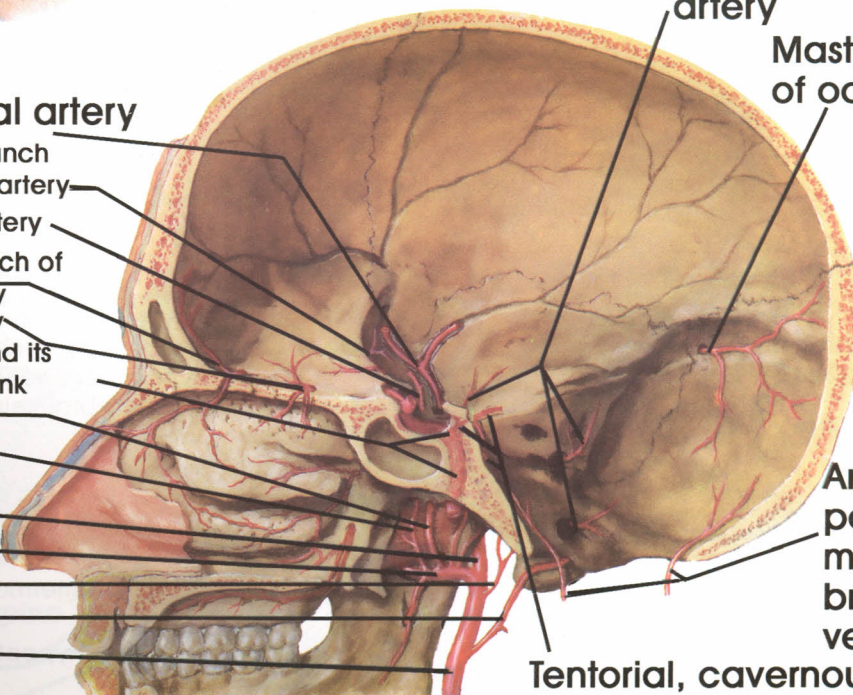
Posterior auricular artery

Occipital artery

External carotid artery

Meningeal branches of ascending pharyngeal artery

Mastoid branch of occipital artery

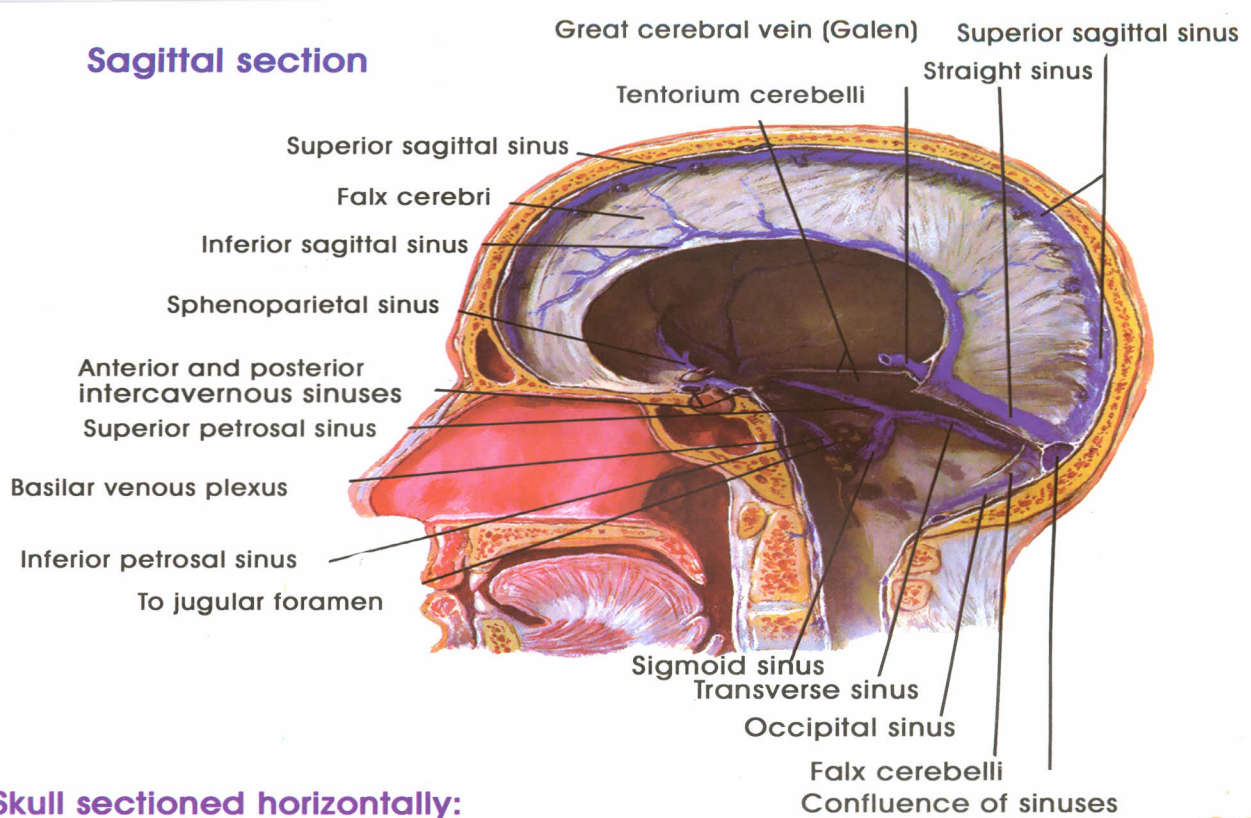


Anterior and posterior meningeal branches of vertebral artery

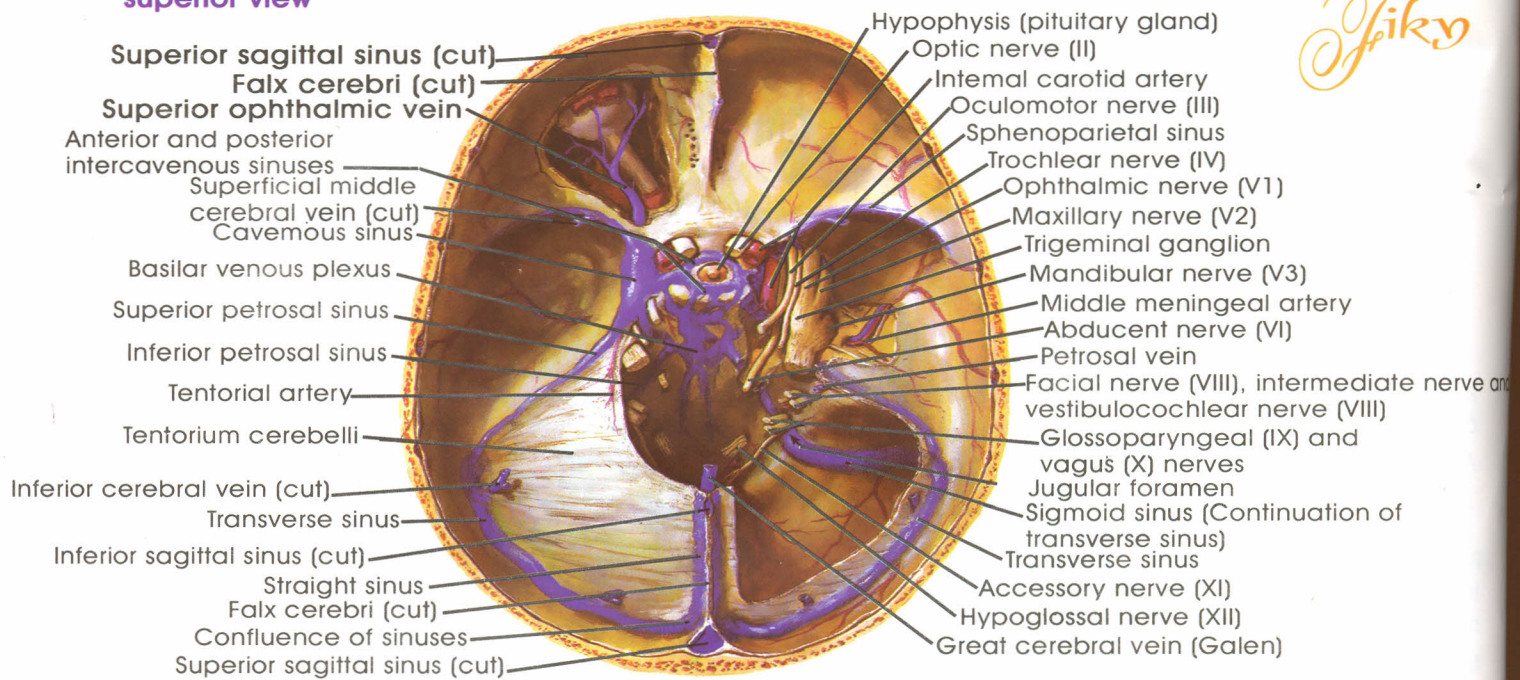
Tentorial, cavernous sinus and meningeal branches of meningo-hypophyseal trunk

MENINGES AND Meningeal arteries

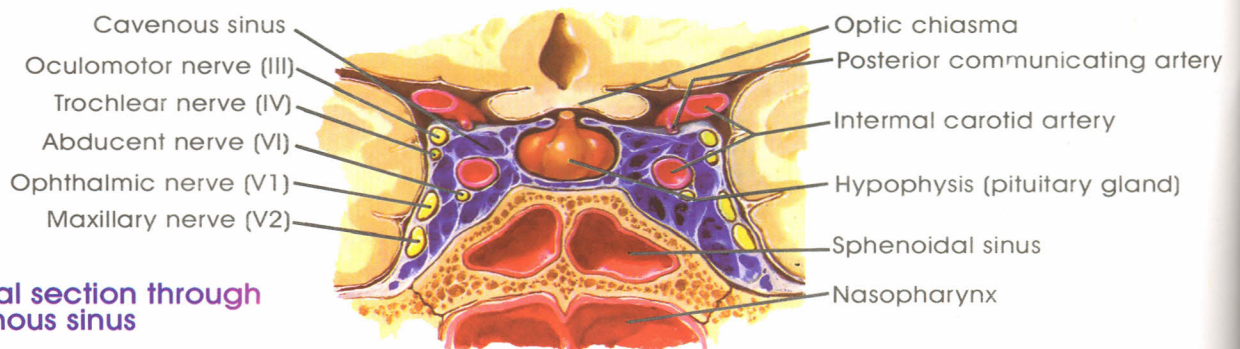
Sagittal section



Skull sectioned horizontally: superior view

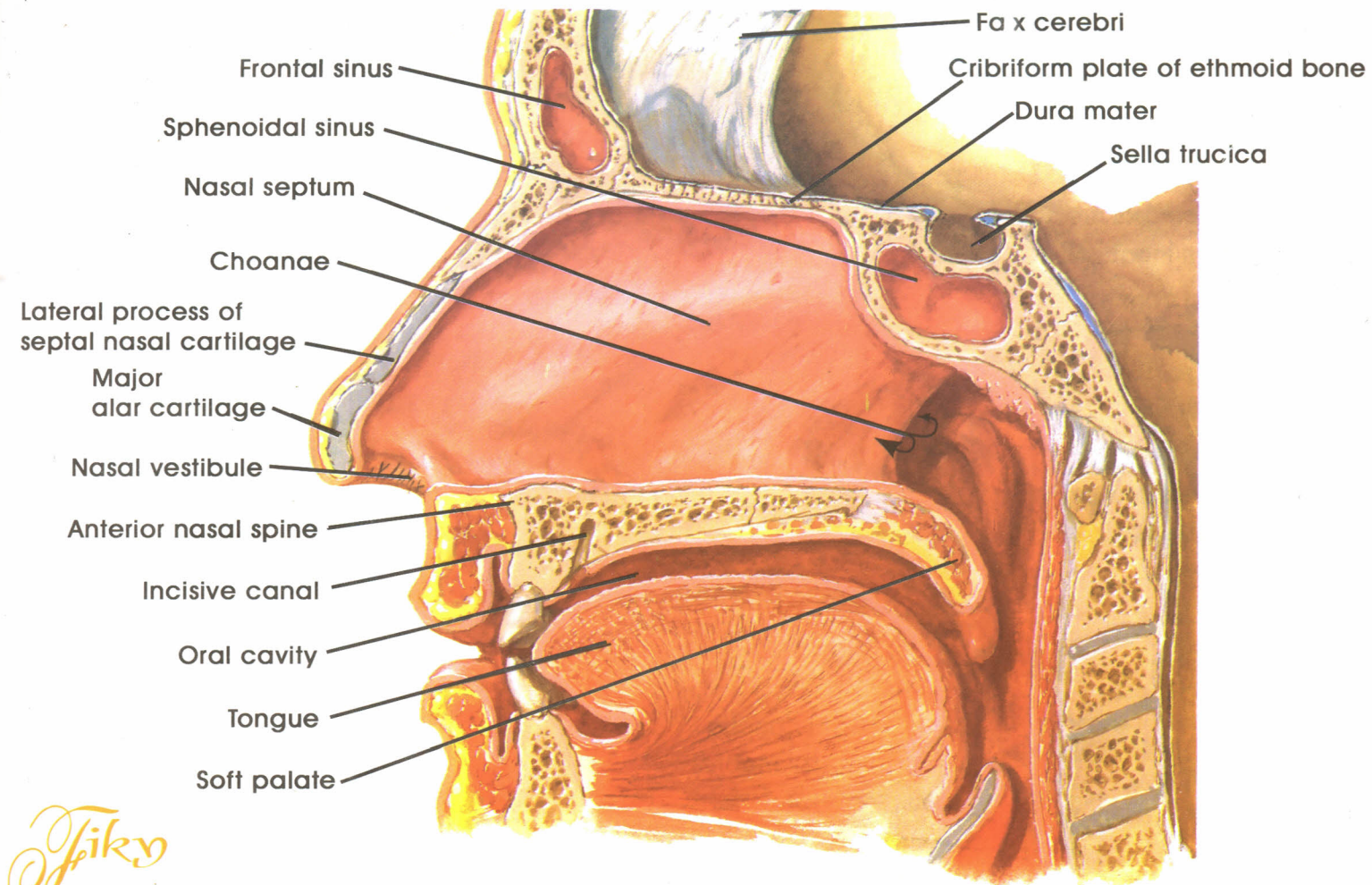


Coronal section through cavernous sinus

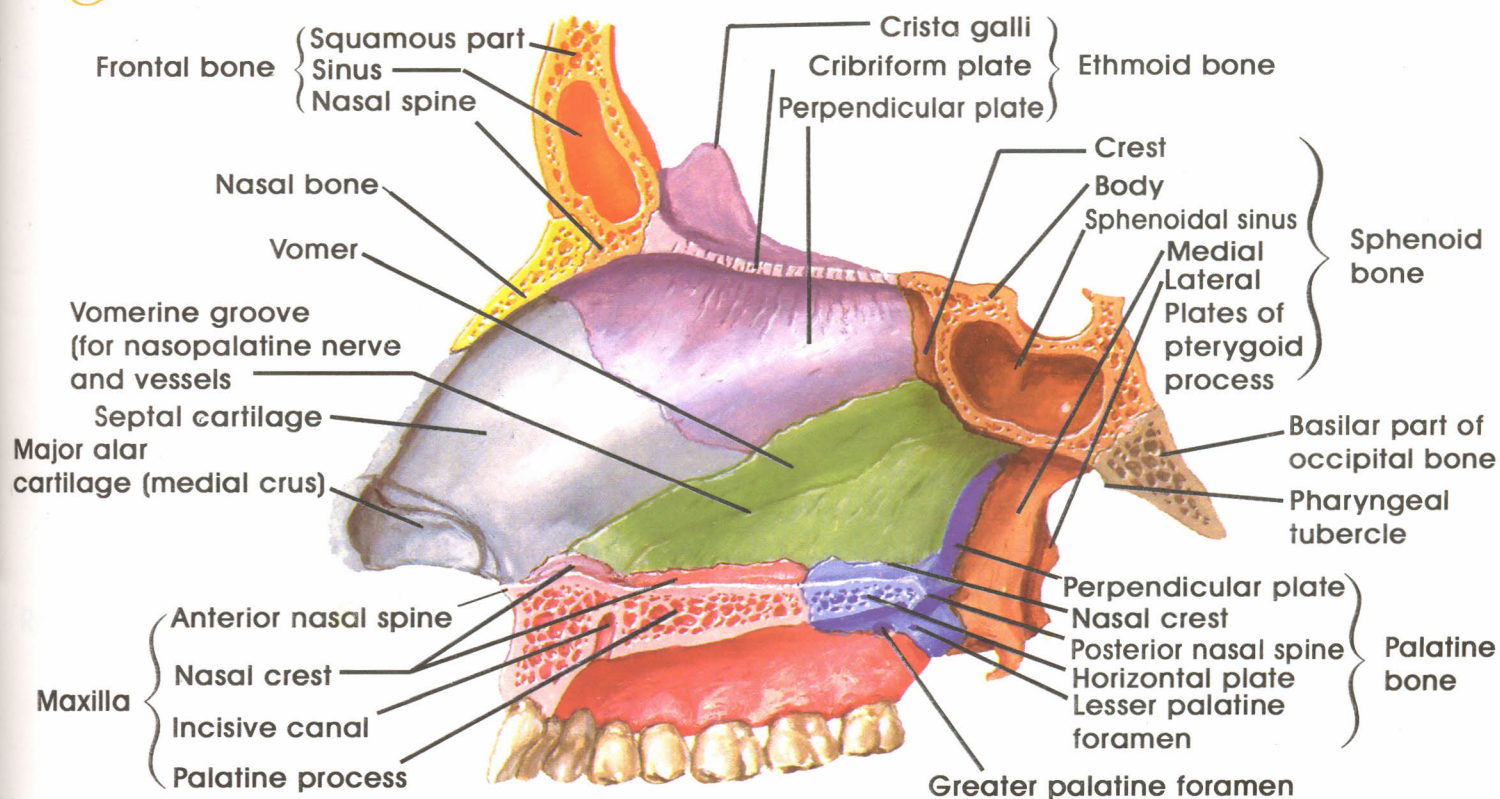


Dural Venous sinuses

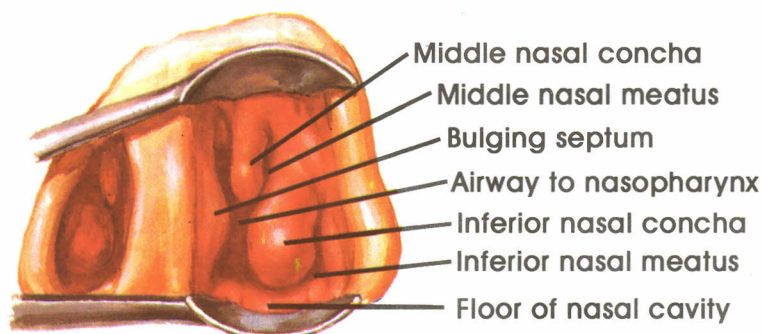
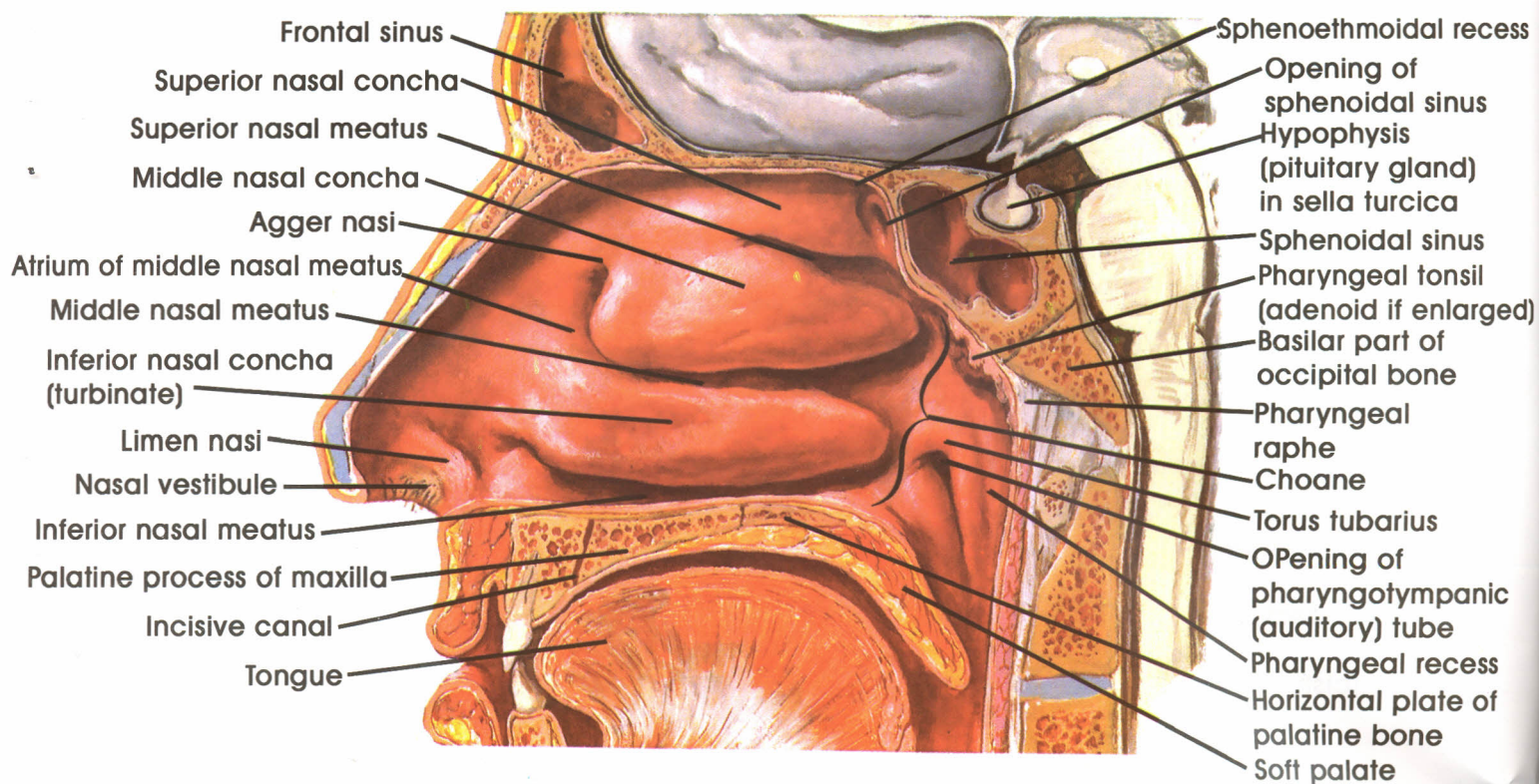
Elfiky



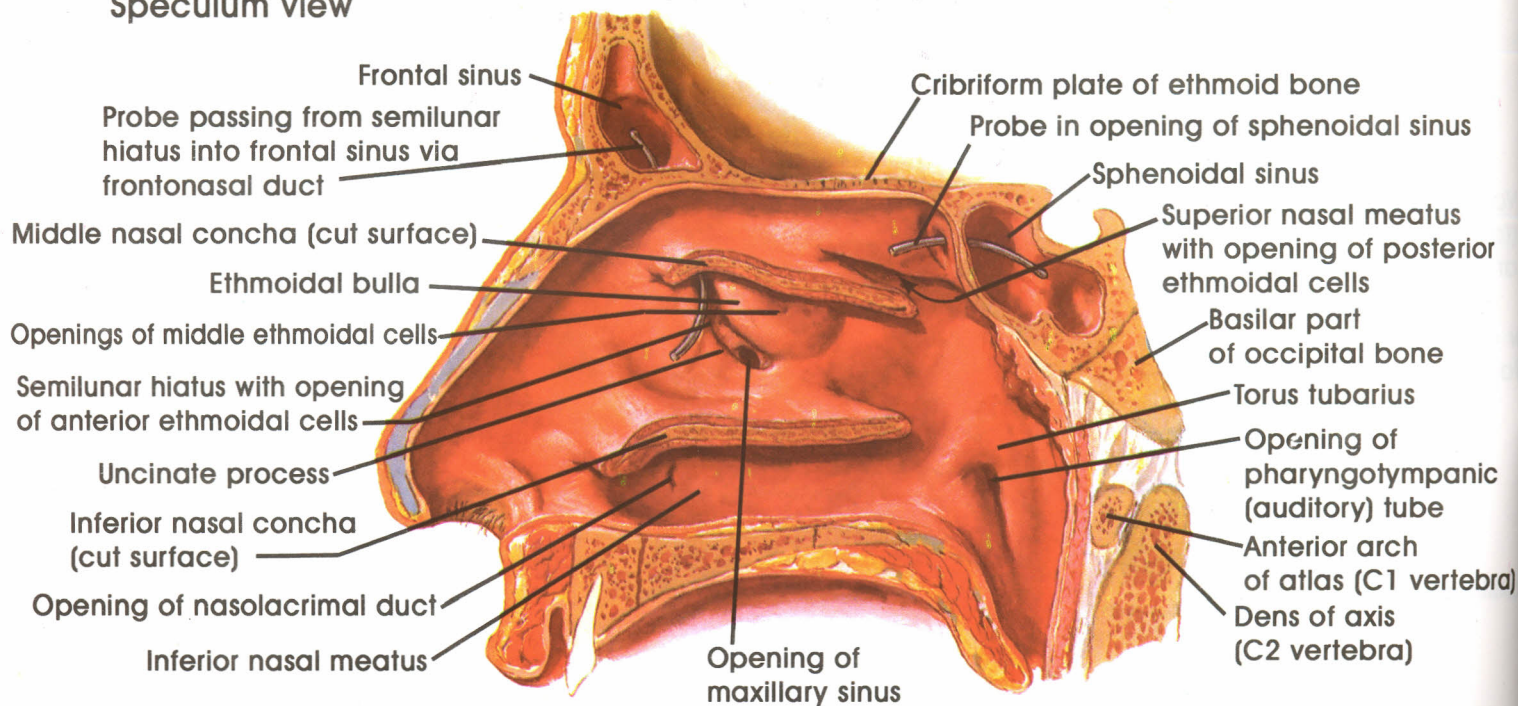
El-fiky



Medial wall of Nasal Cavity (Nasal Septum)

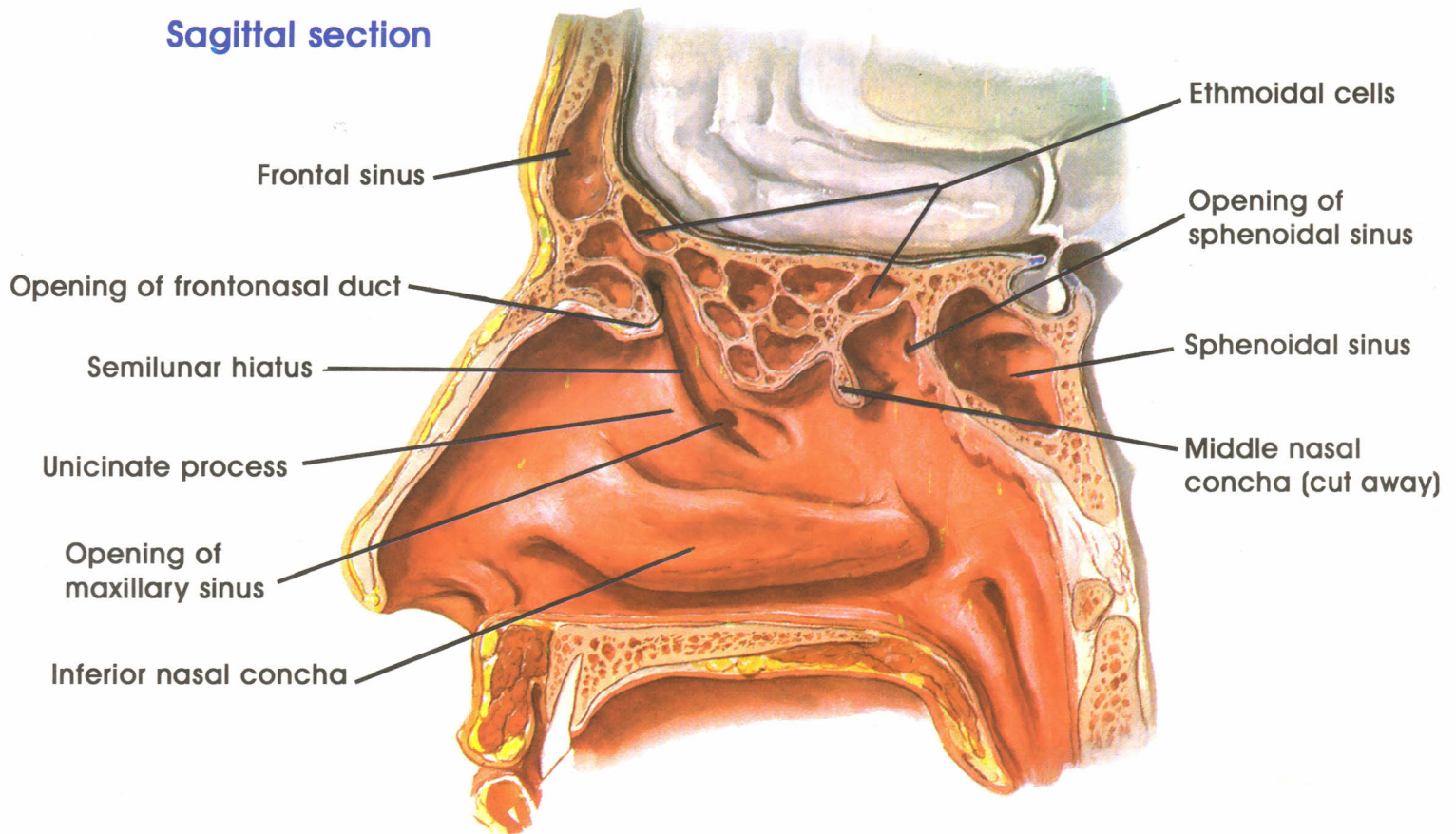


Speculum view

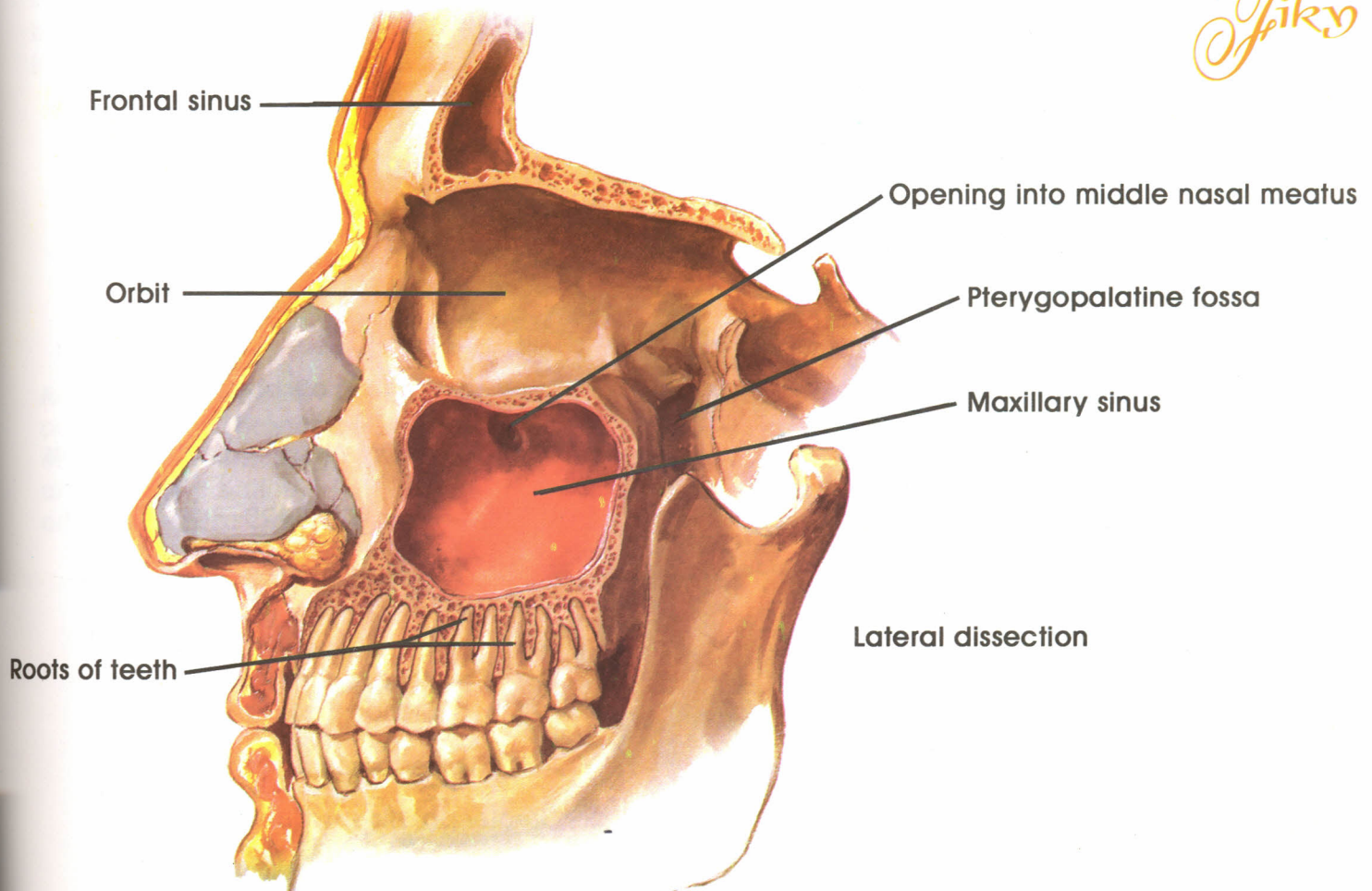


Lateral Wall of Nasal Cavity

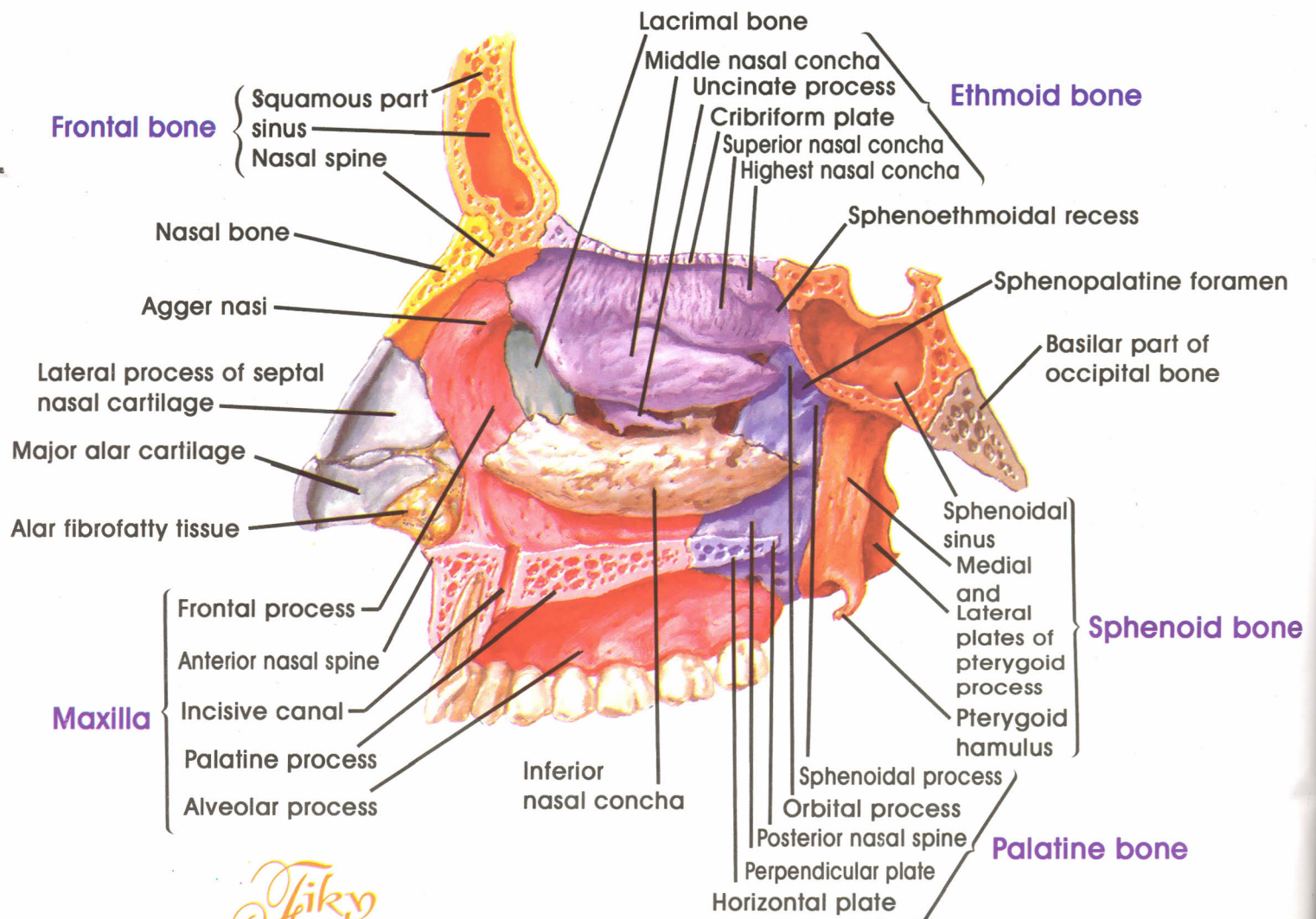
Sagittal section



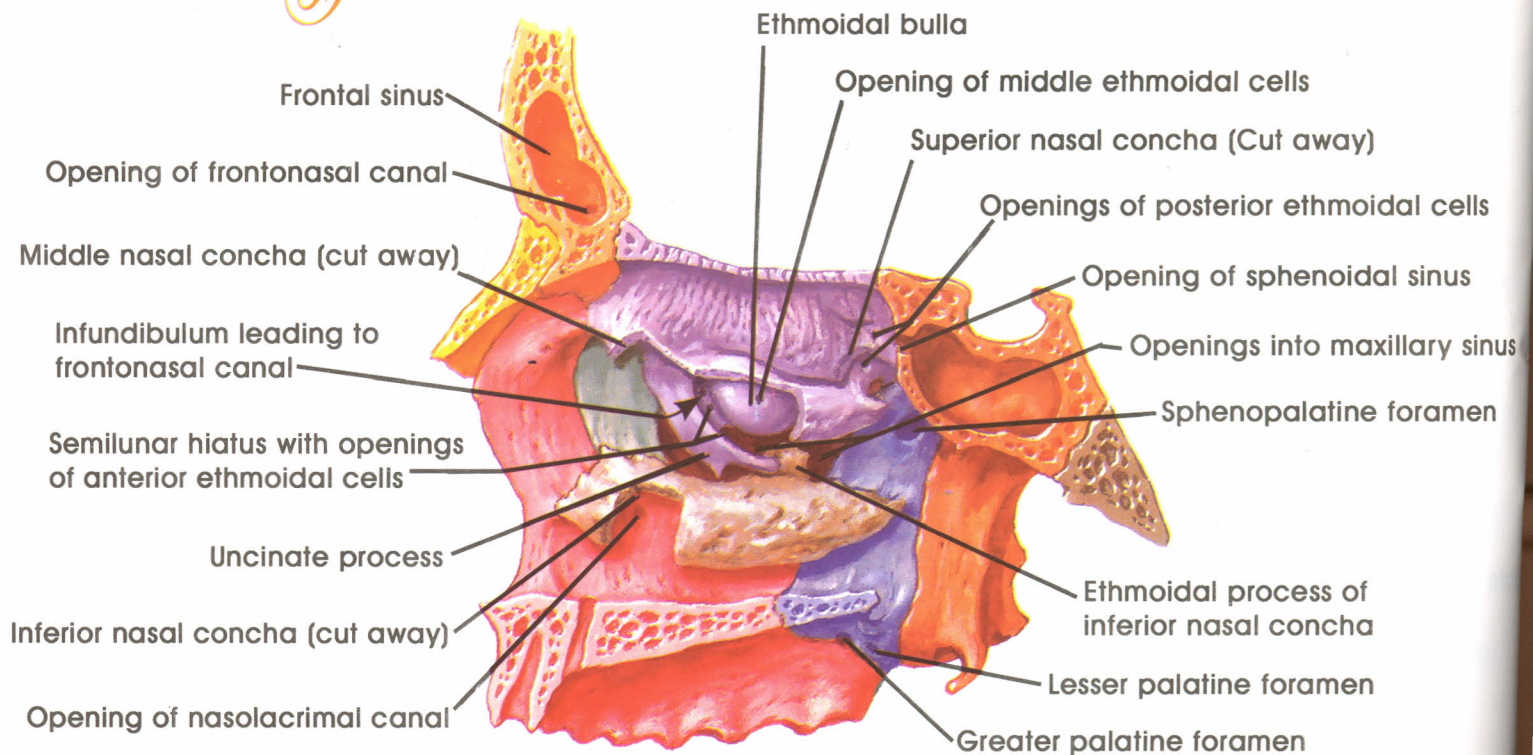
El-Fiky



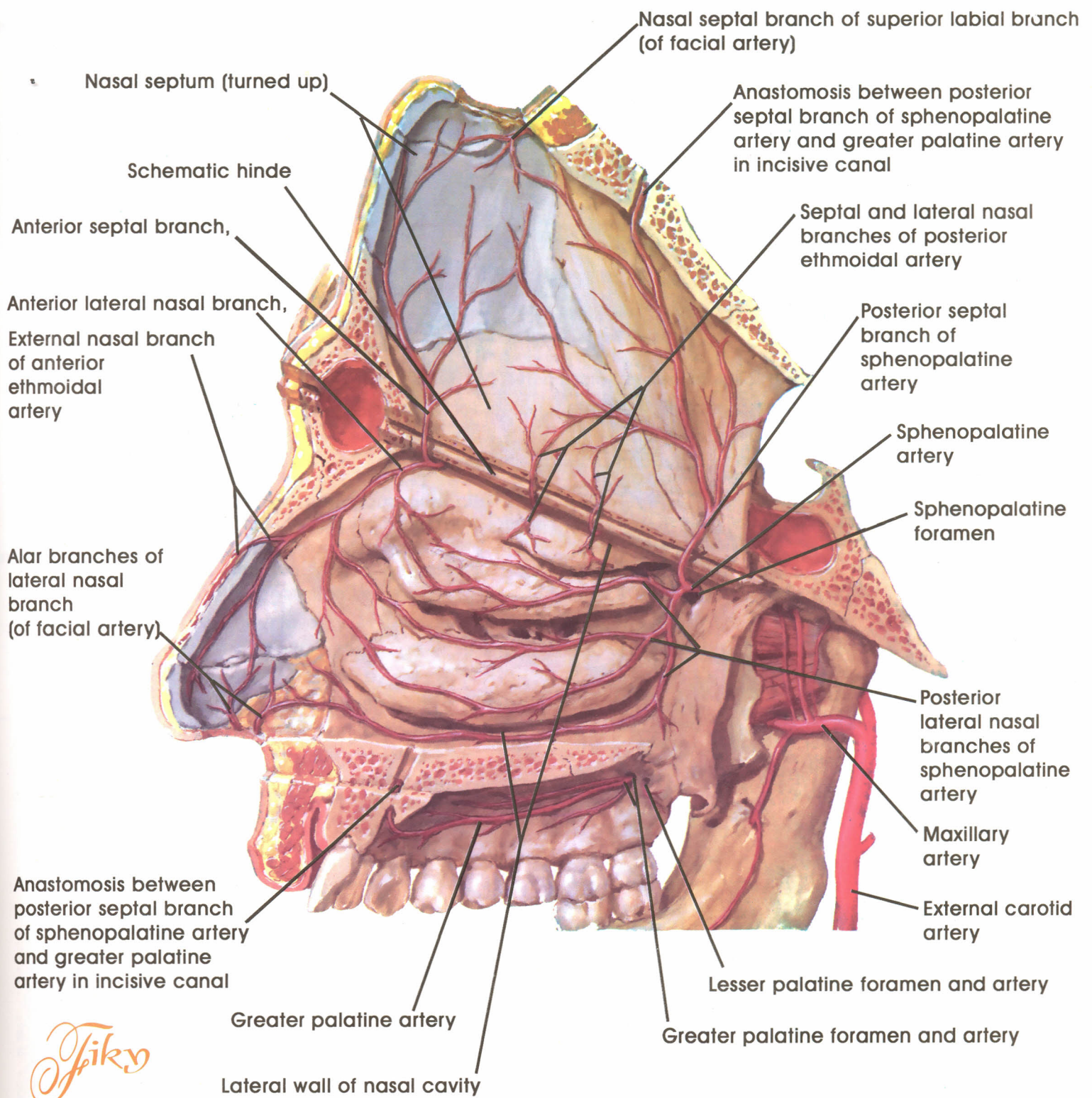
Lateral wall of Nasal Cavity (lateral dissection)



Spiky

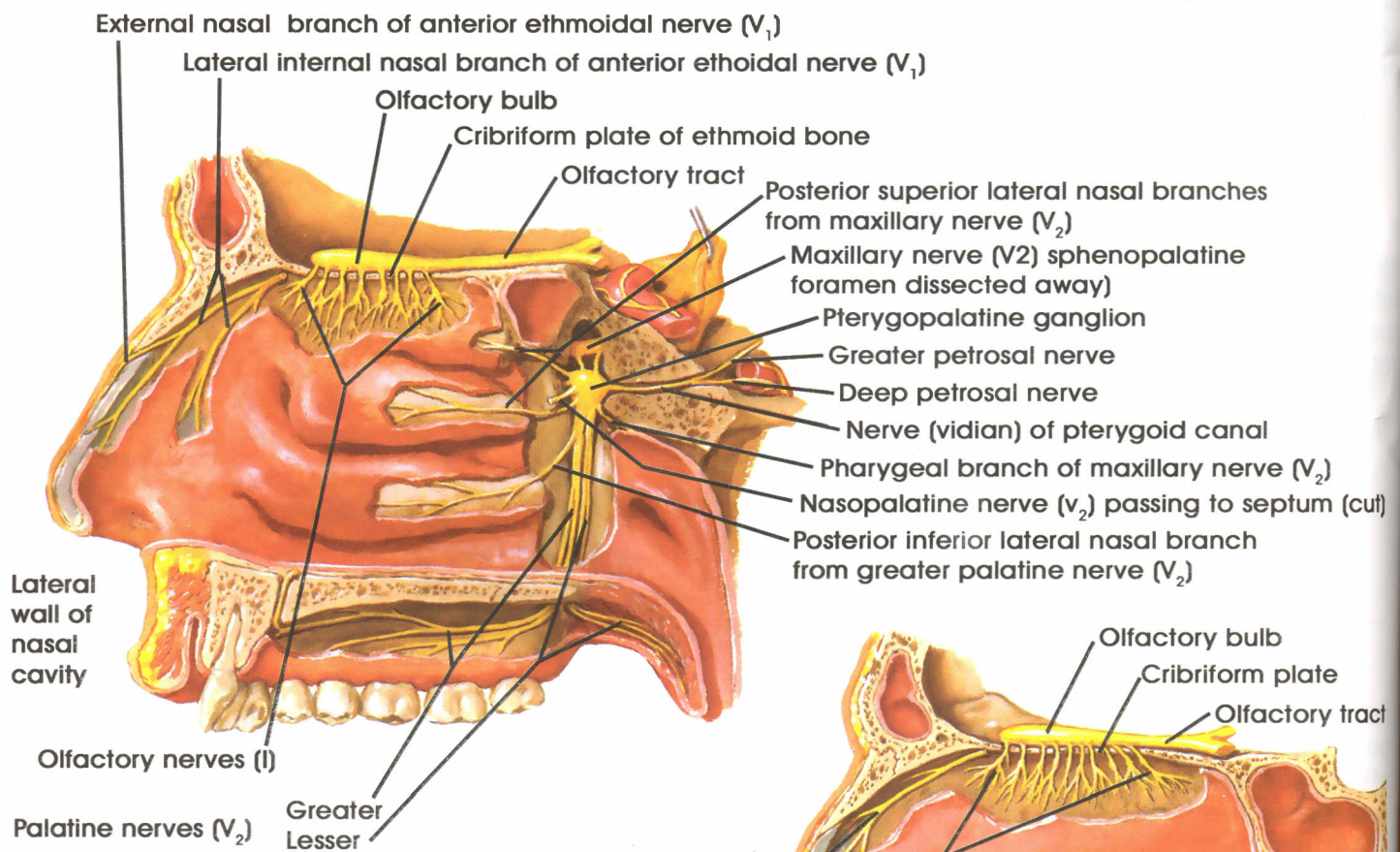
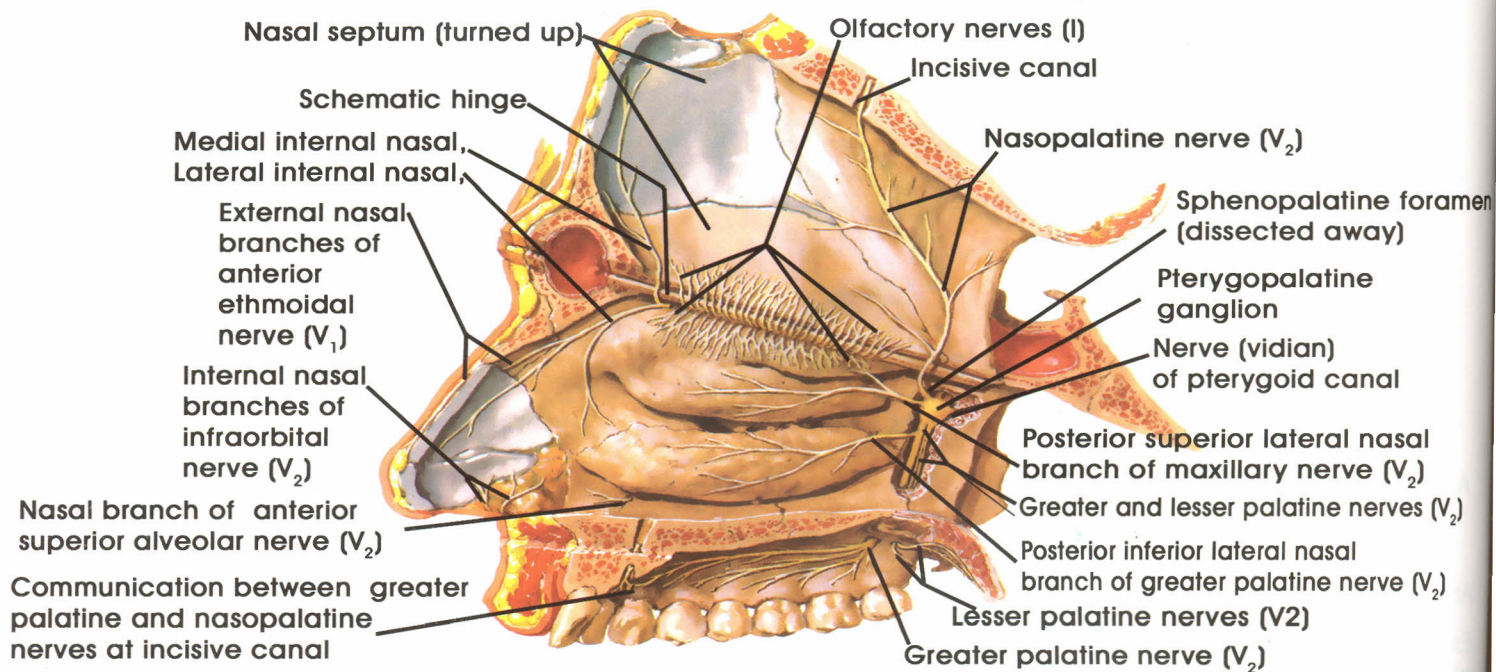


Lateral wall of Nasal Cavity (continued)



El-Fiky

Arteries of Nasal cavity - Nasal septum Turned Up



Elfiky

Medial internal nasal branch of anterior ethmoidal nerve (V_1)

Olfactory nerves (I)

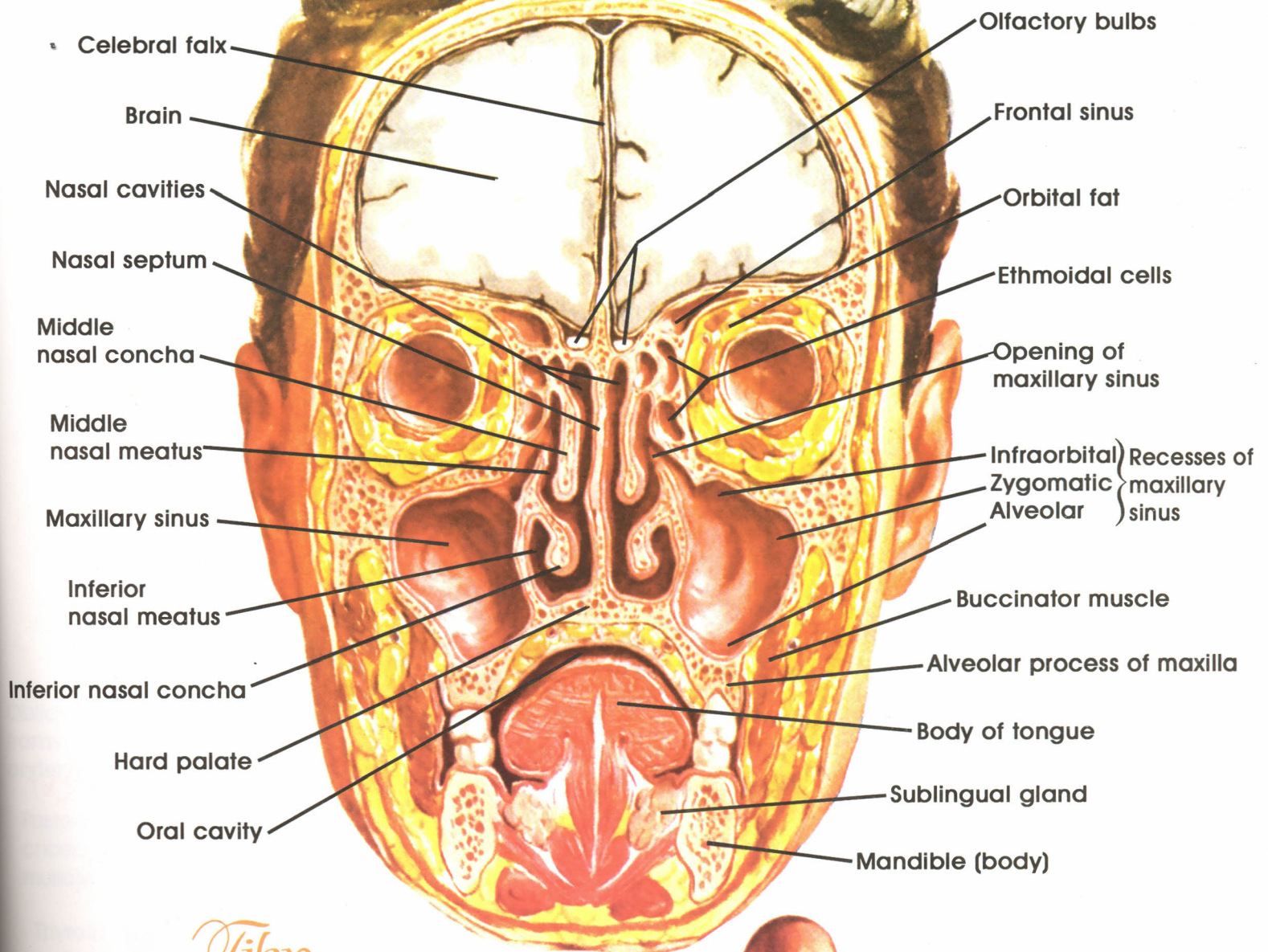
Nasopalatine nerve (V_2)

Incisive canal

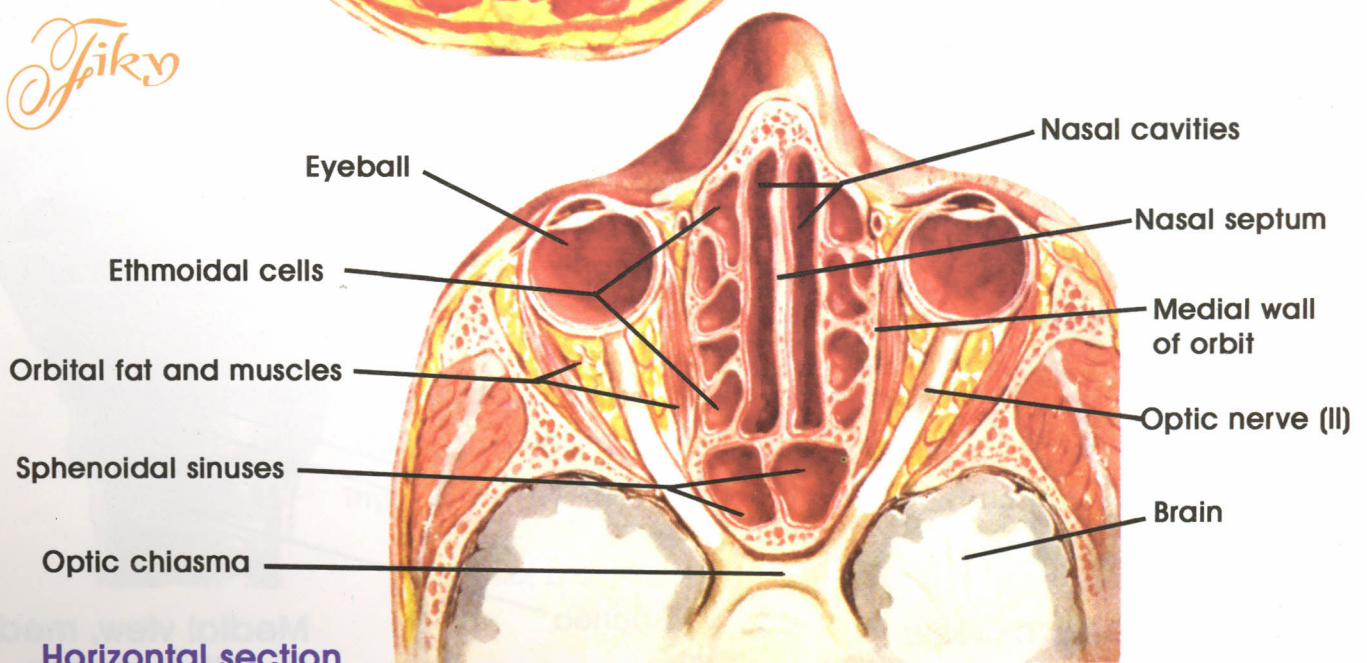
Nasal septum

Nerves of Nasal cavity

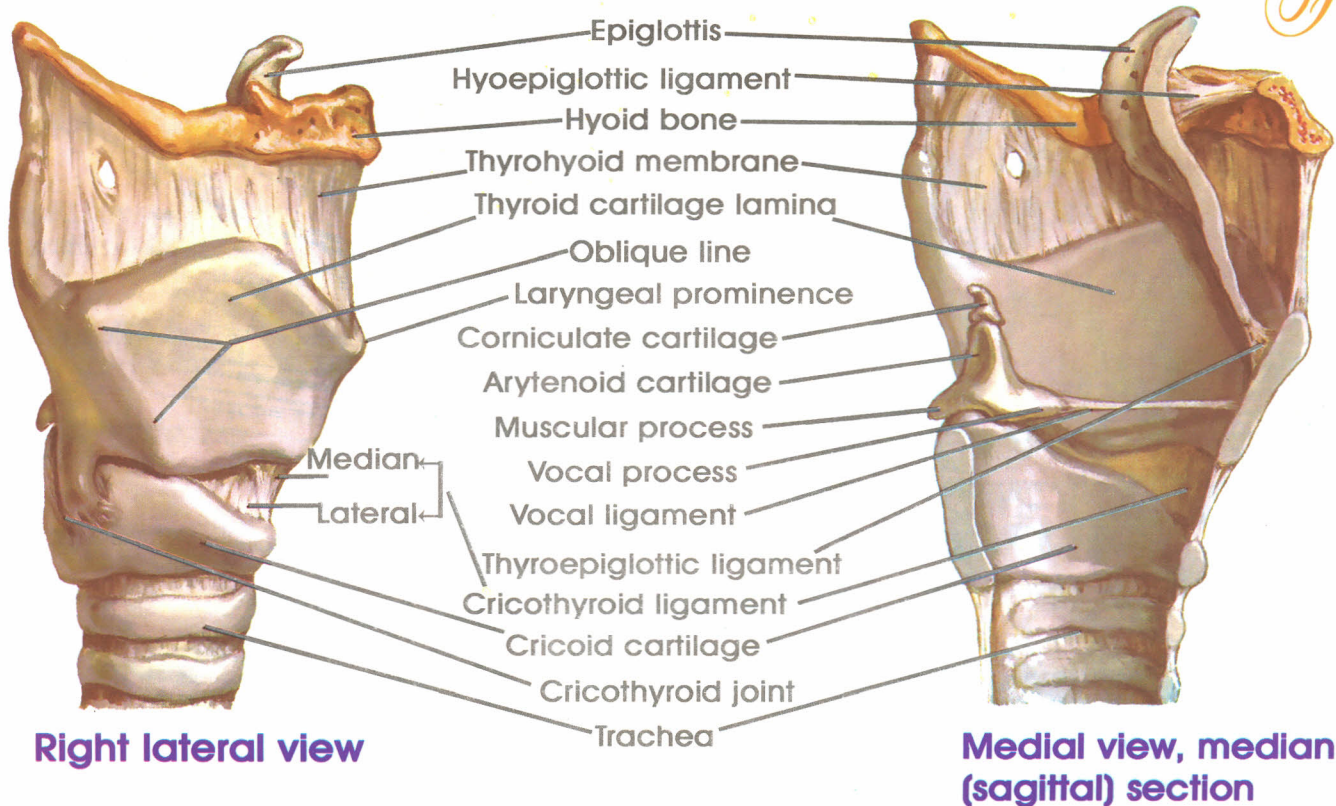
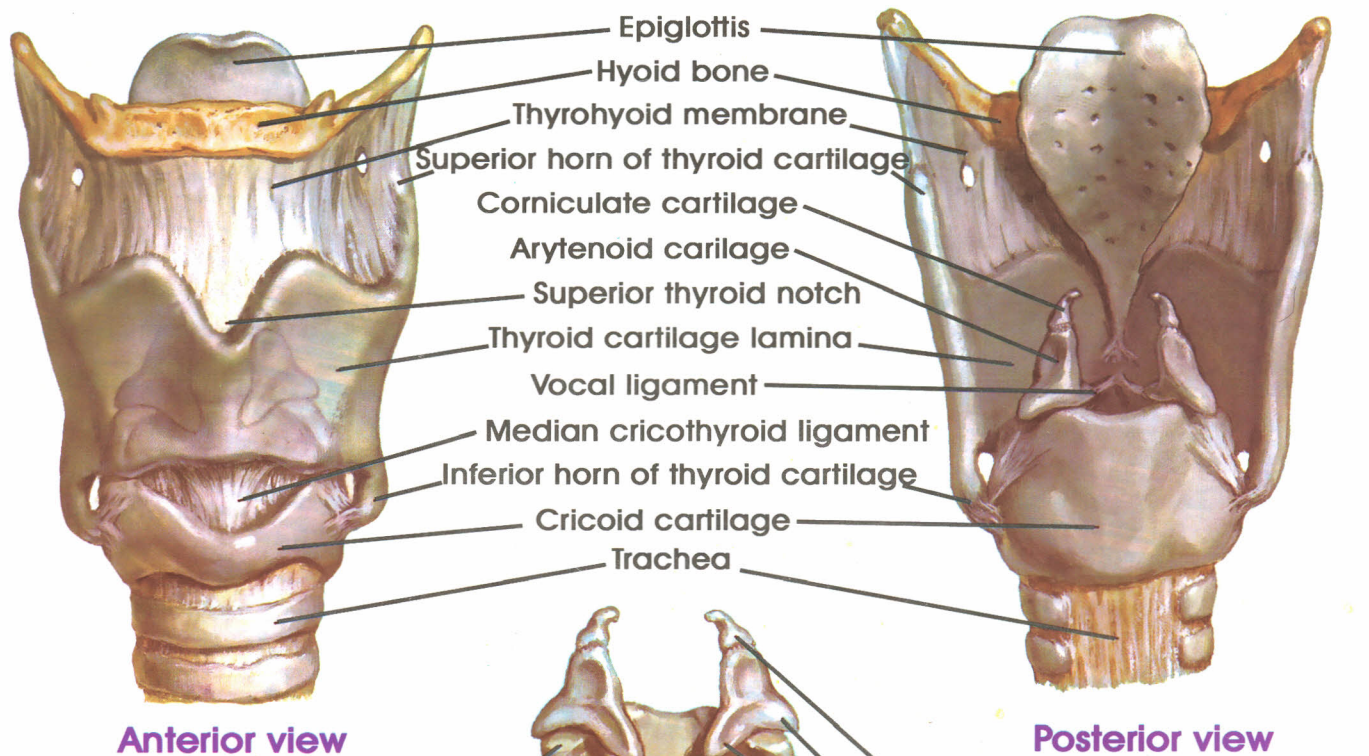
Coronal section



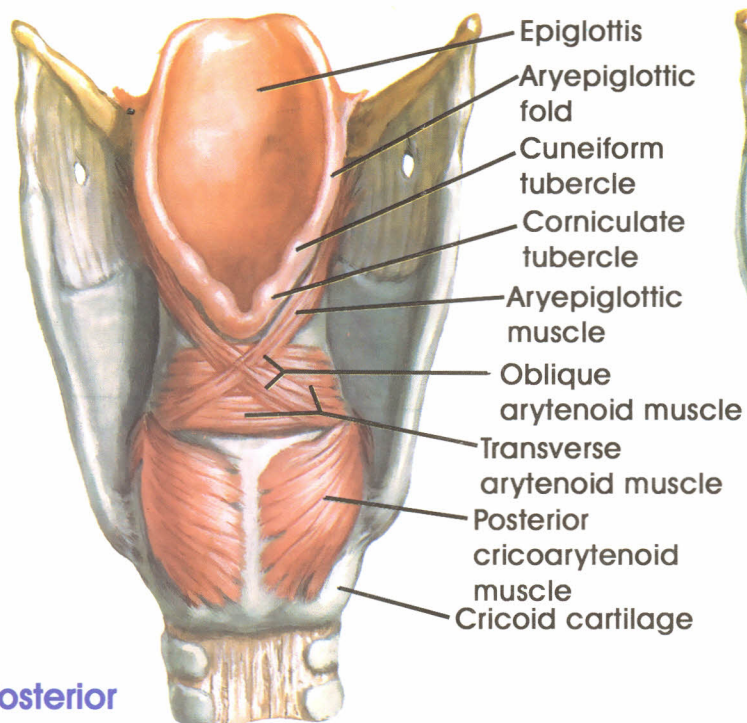
Spiky



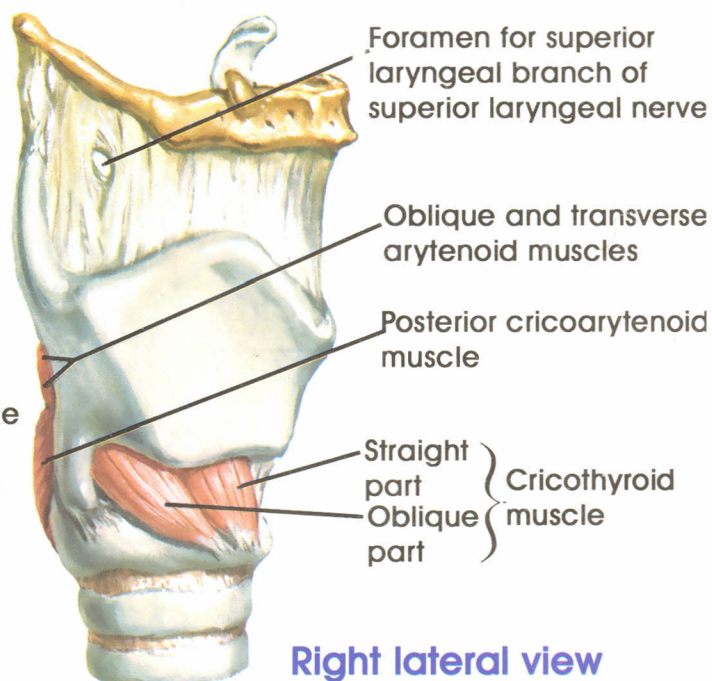
Horizontal section



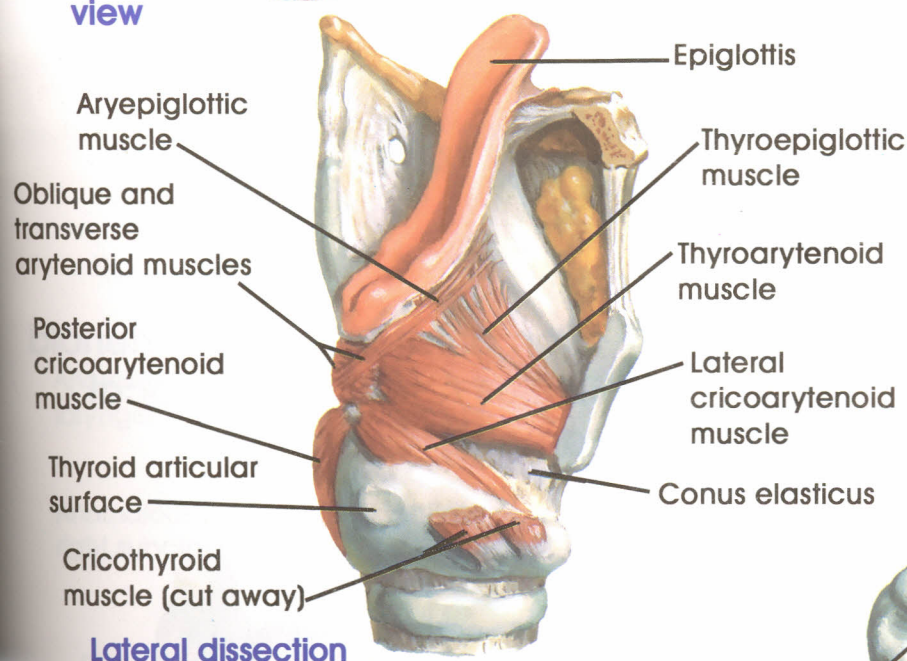
Cartilages of Larynx



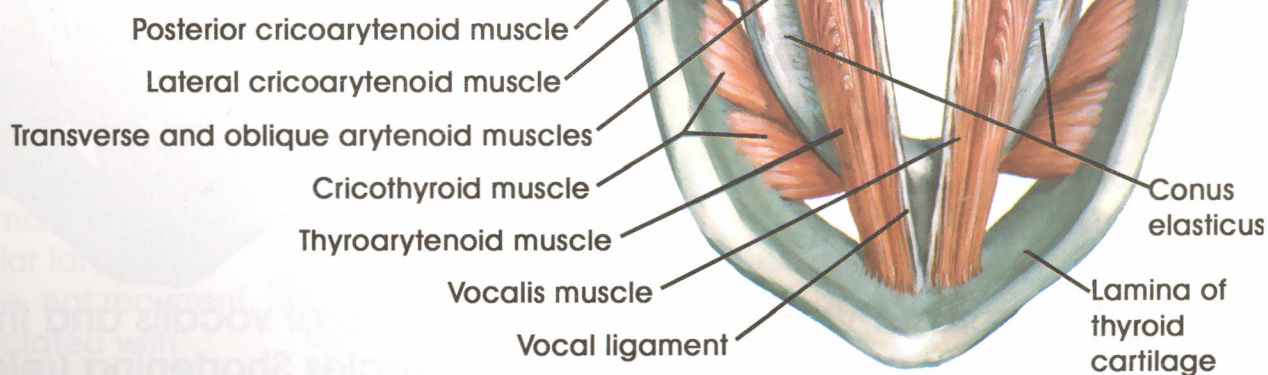
Posterior view



Right lateral view

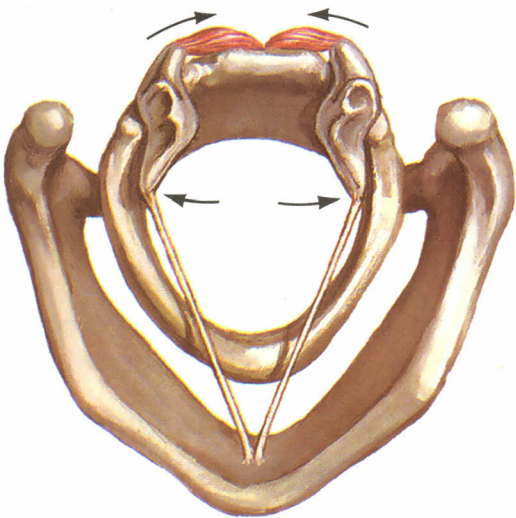
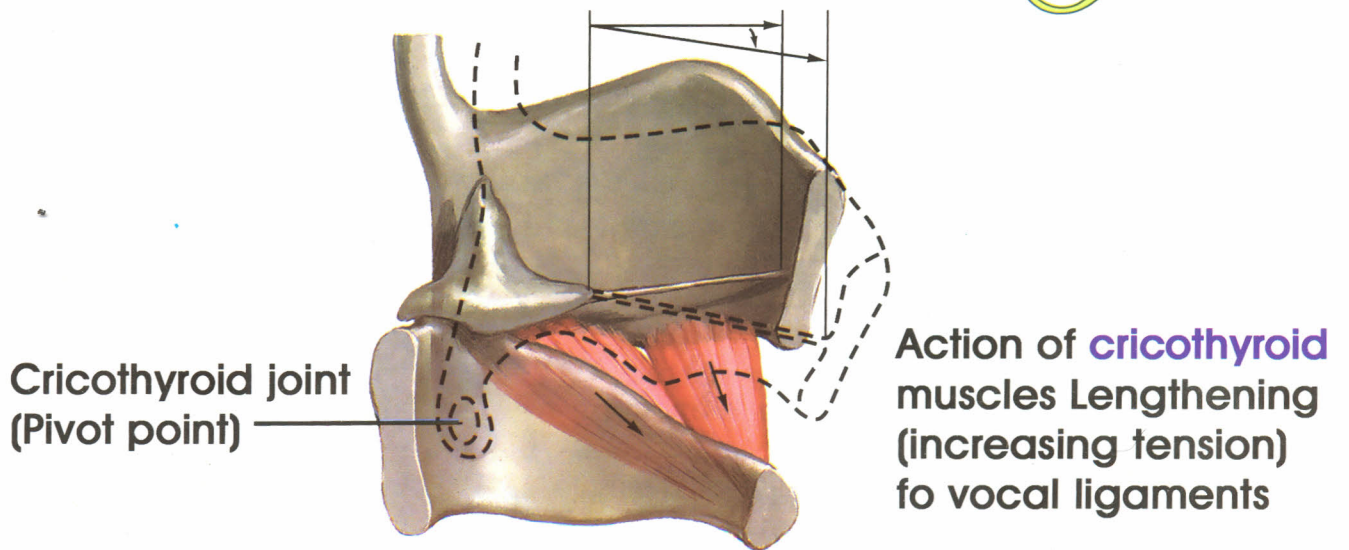


Lateral dissection

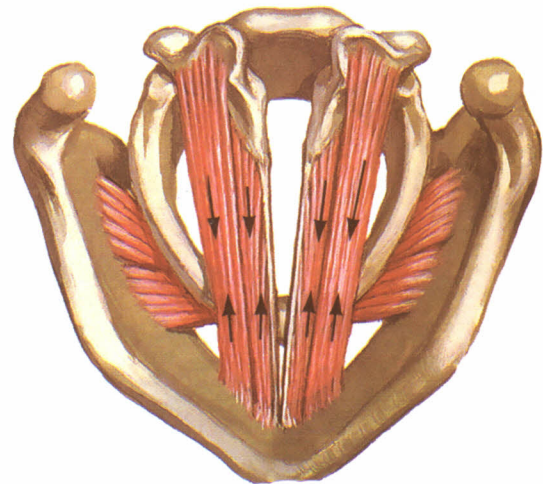
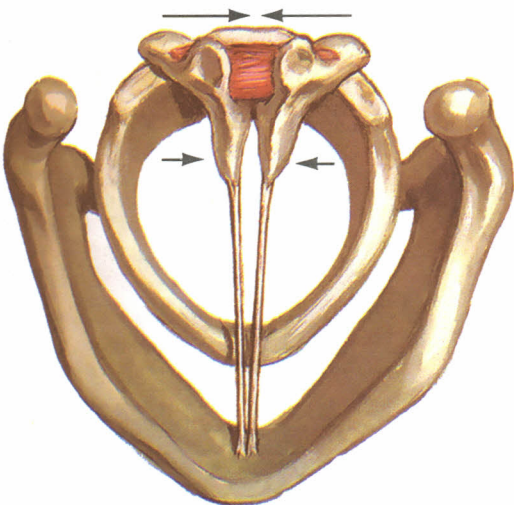
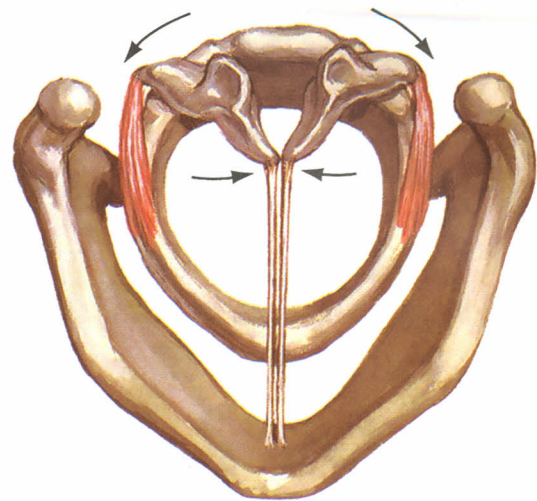


Superior view

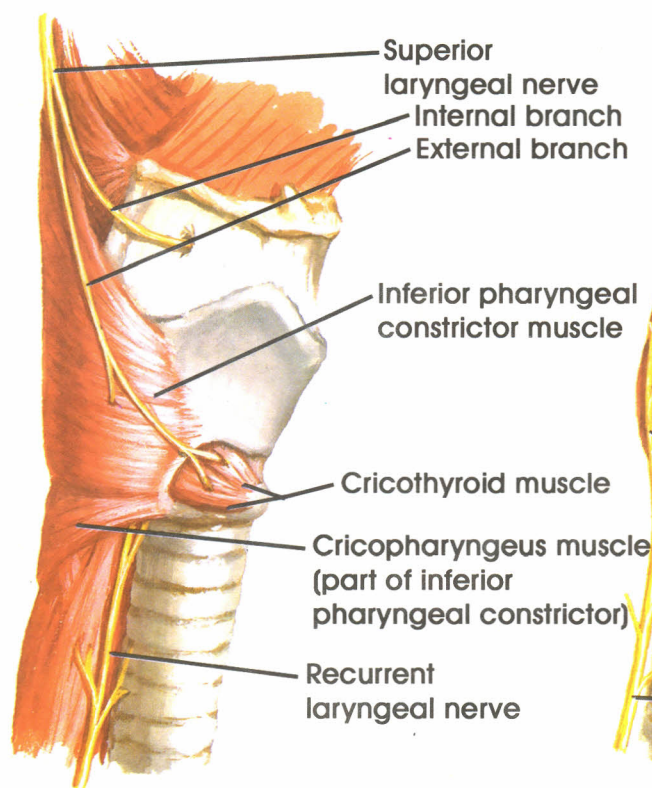
Intrinsic Muscles of Larynx



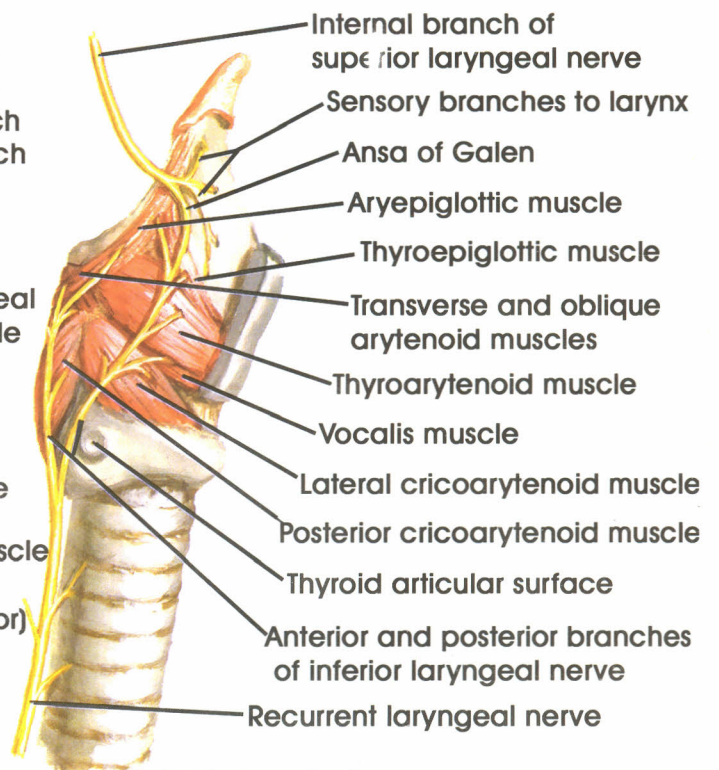
Spiky



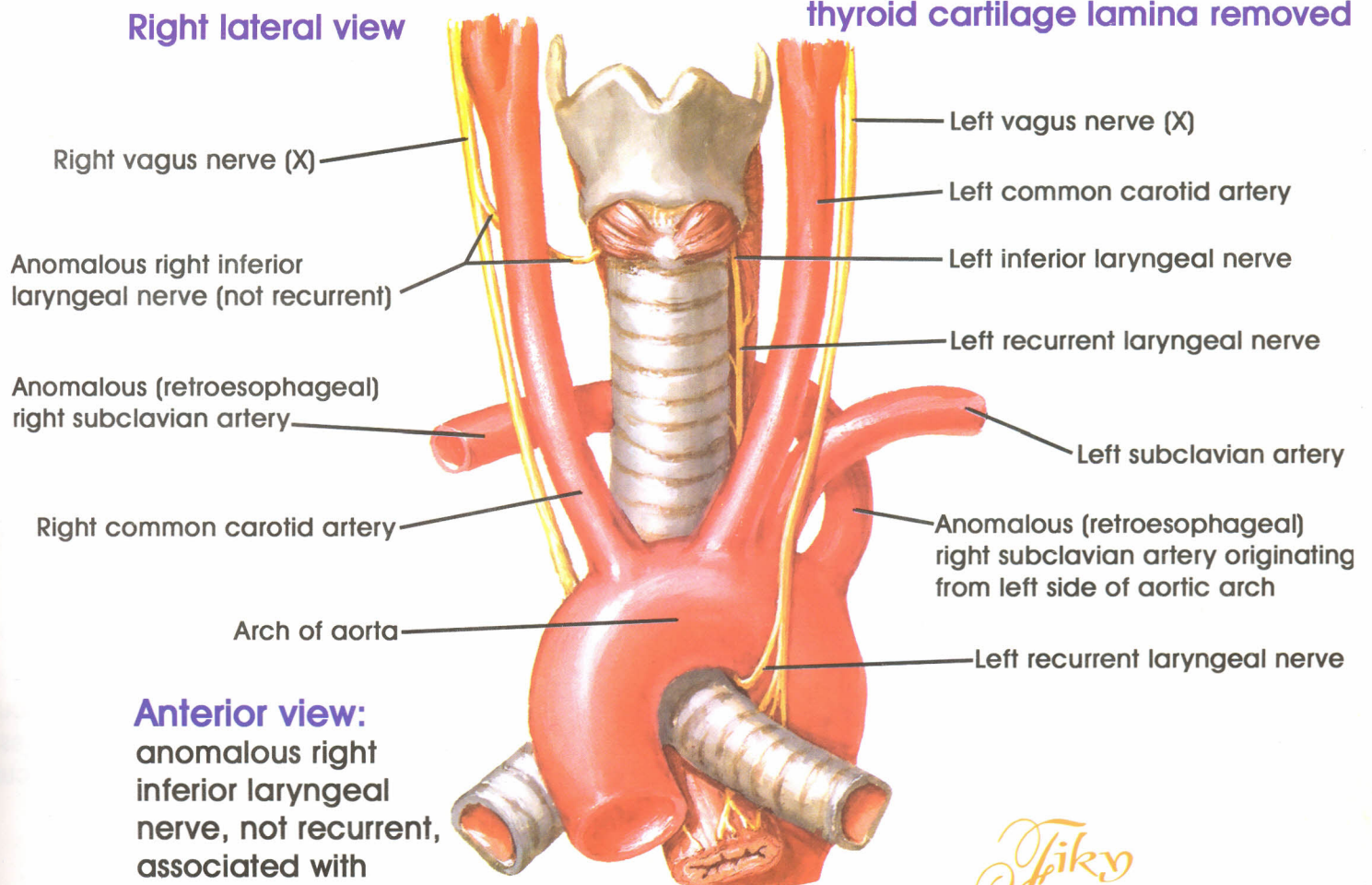
Action of Intrinsic Muscles of Larynx



Right lateral view



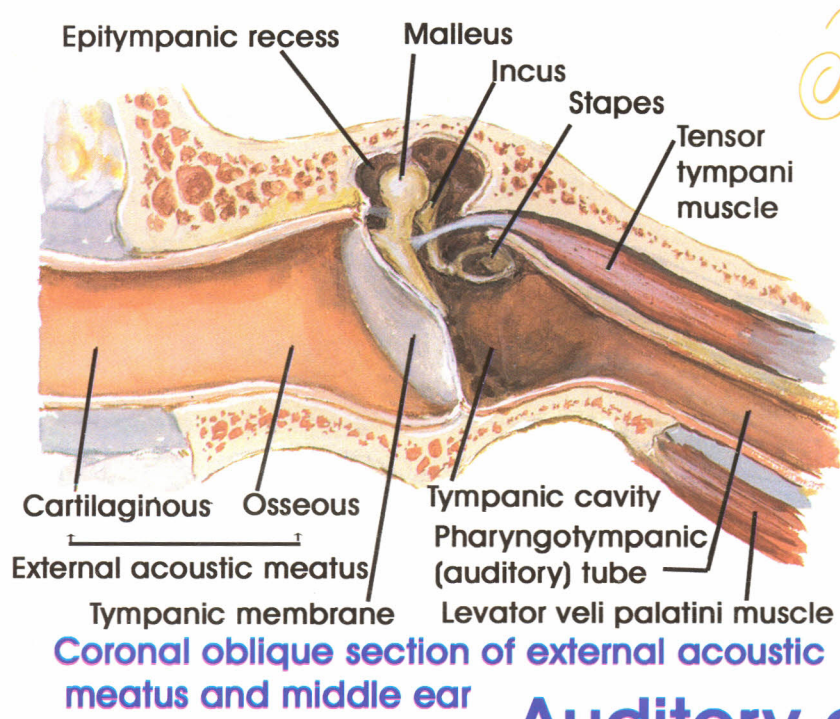
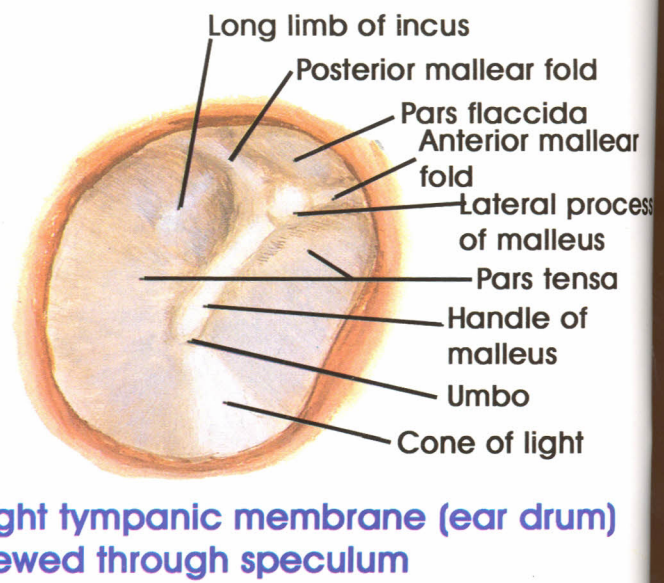
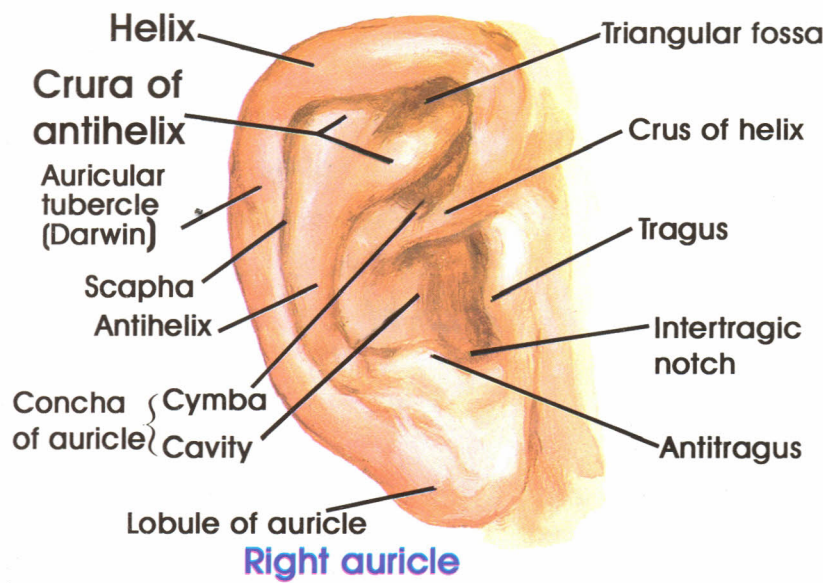
**Right lateral view:
thyroid cartilage lamina removed**



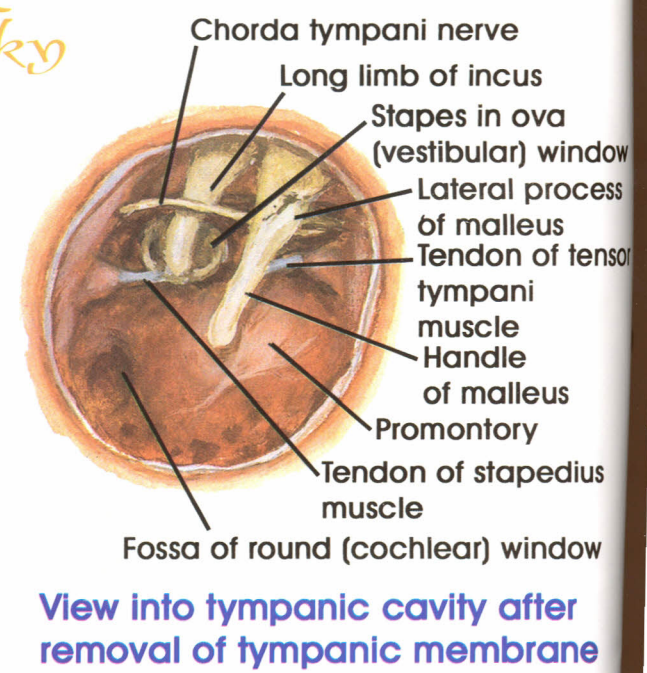
Anterior view:
anomalous right inferior laryngeal nerve, not recurrent, associated with anomalous right subclavian artery

Nerves of Larynx

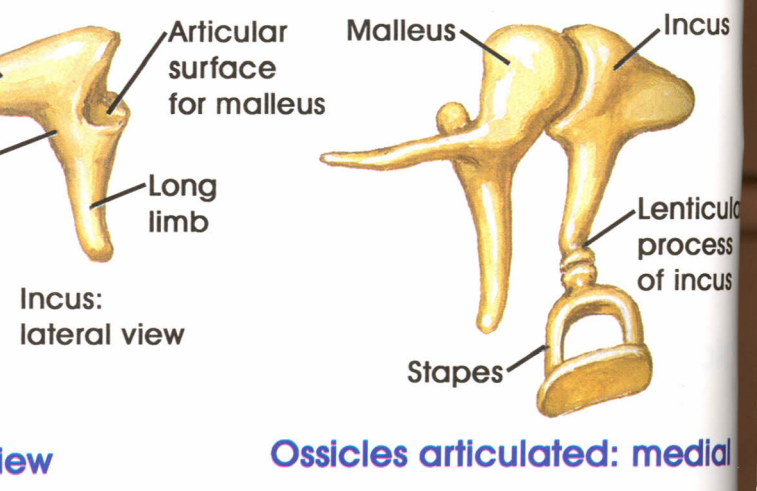
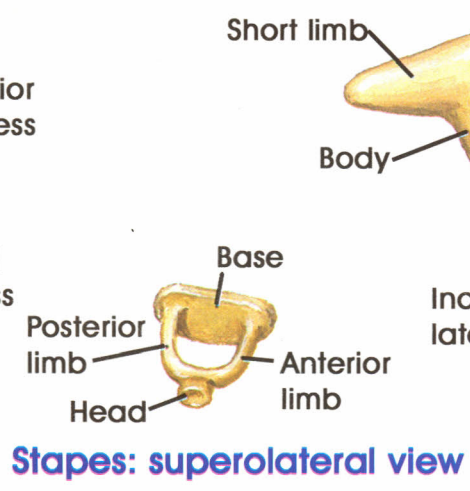
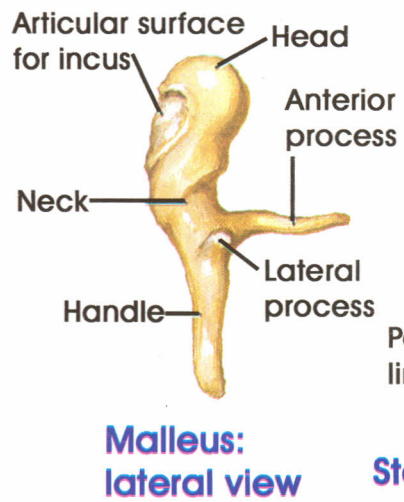
Tricky



Tricky

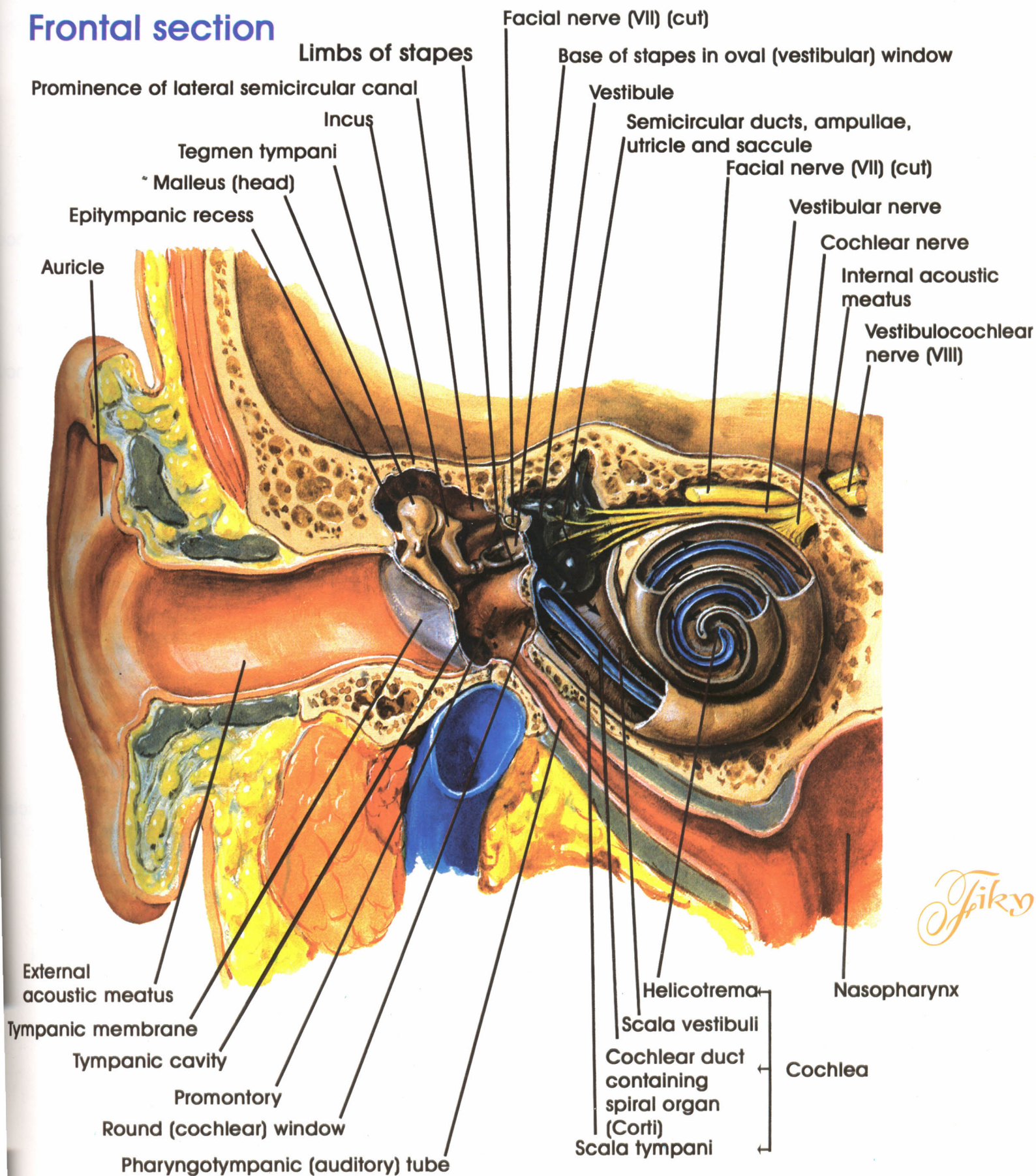


Auditory ossicles



External Ear and Tympanic Cavity

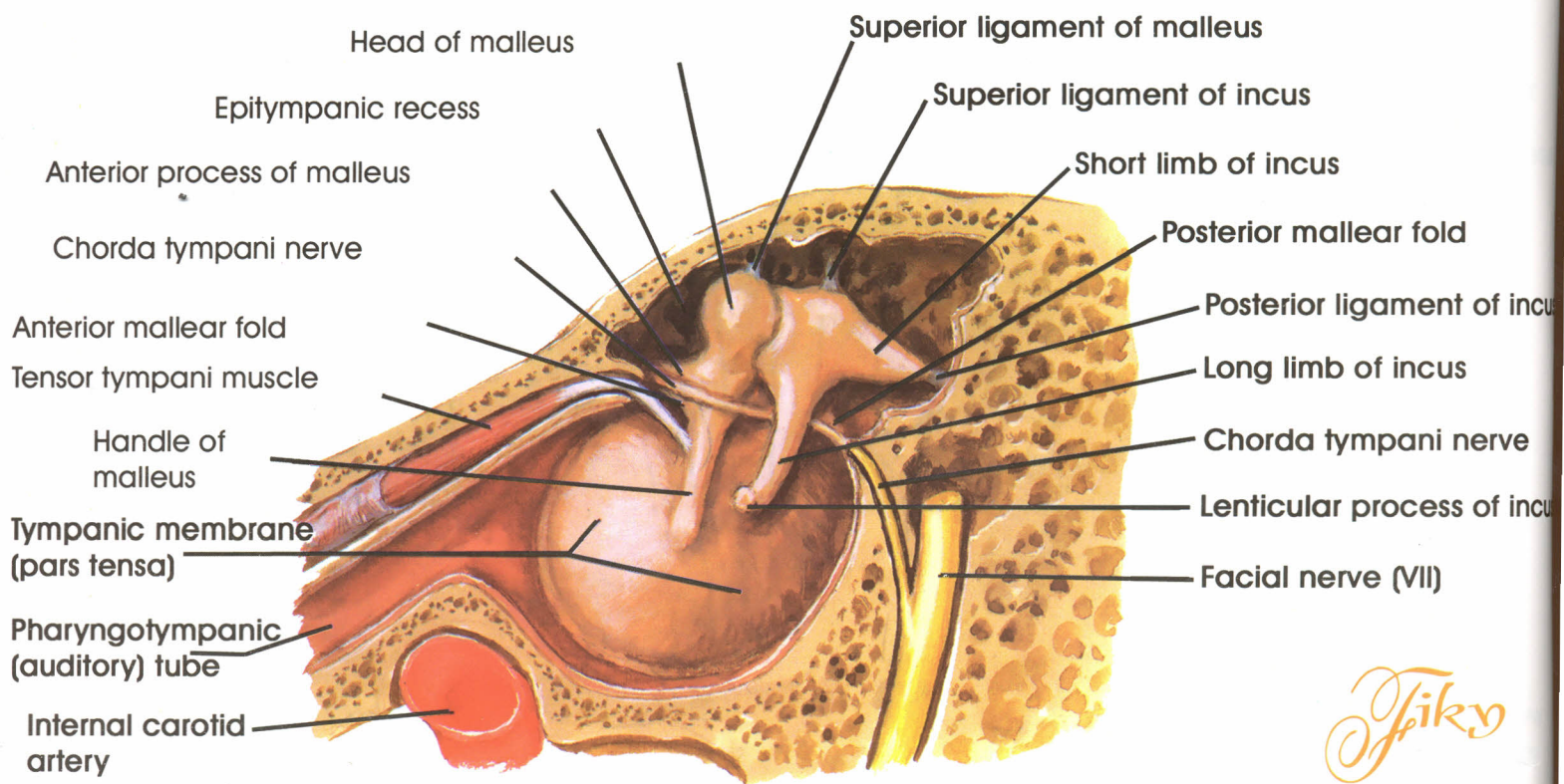
Frontal section



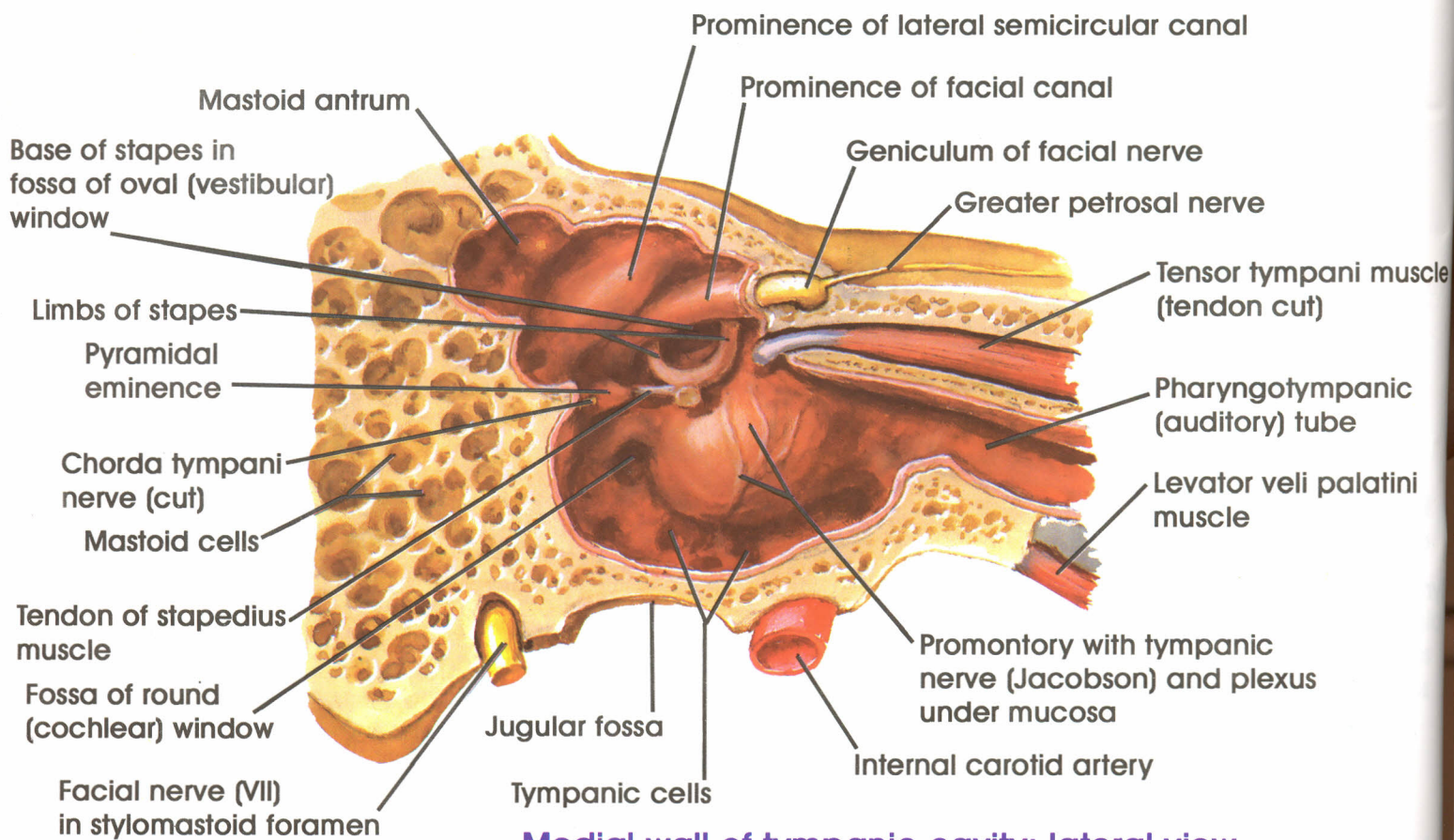
Fiky

Note: Arrows indicate course of sound waves

Pathway of Sound Reception



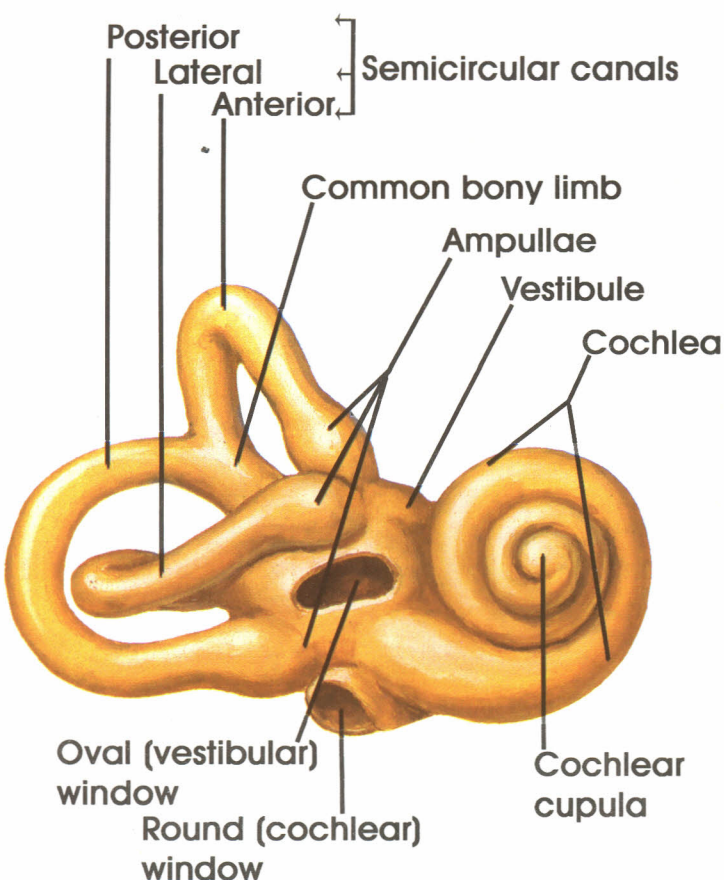
Lateral wall of Tympanic Cavity: medial (internal) view



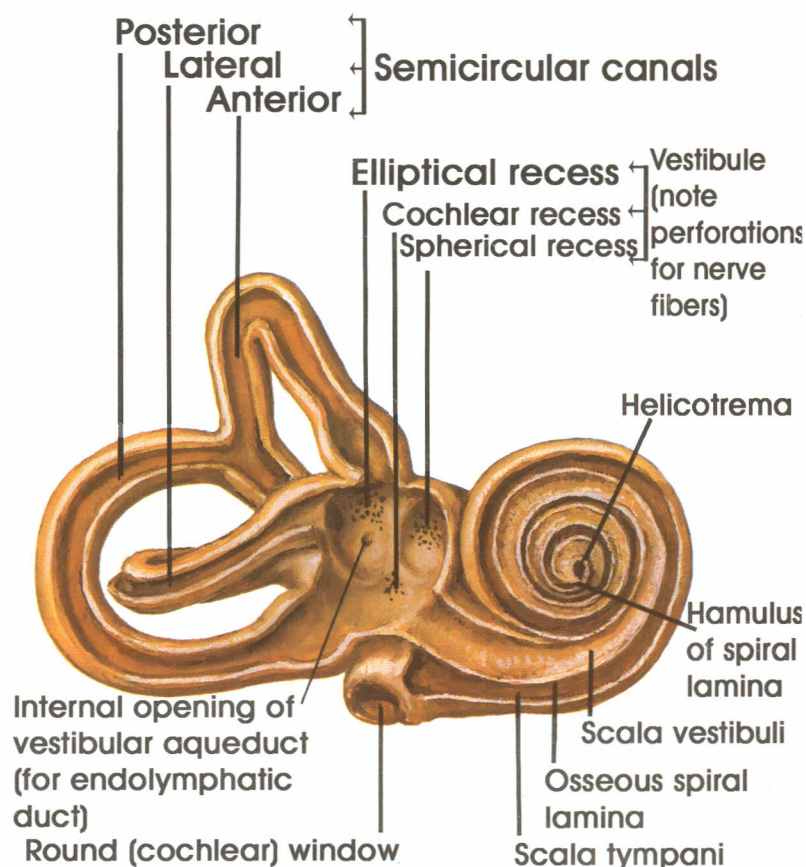
Medial wall of tympanic cavity: lateral view

Tympanic Cavity

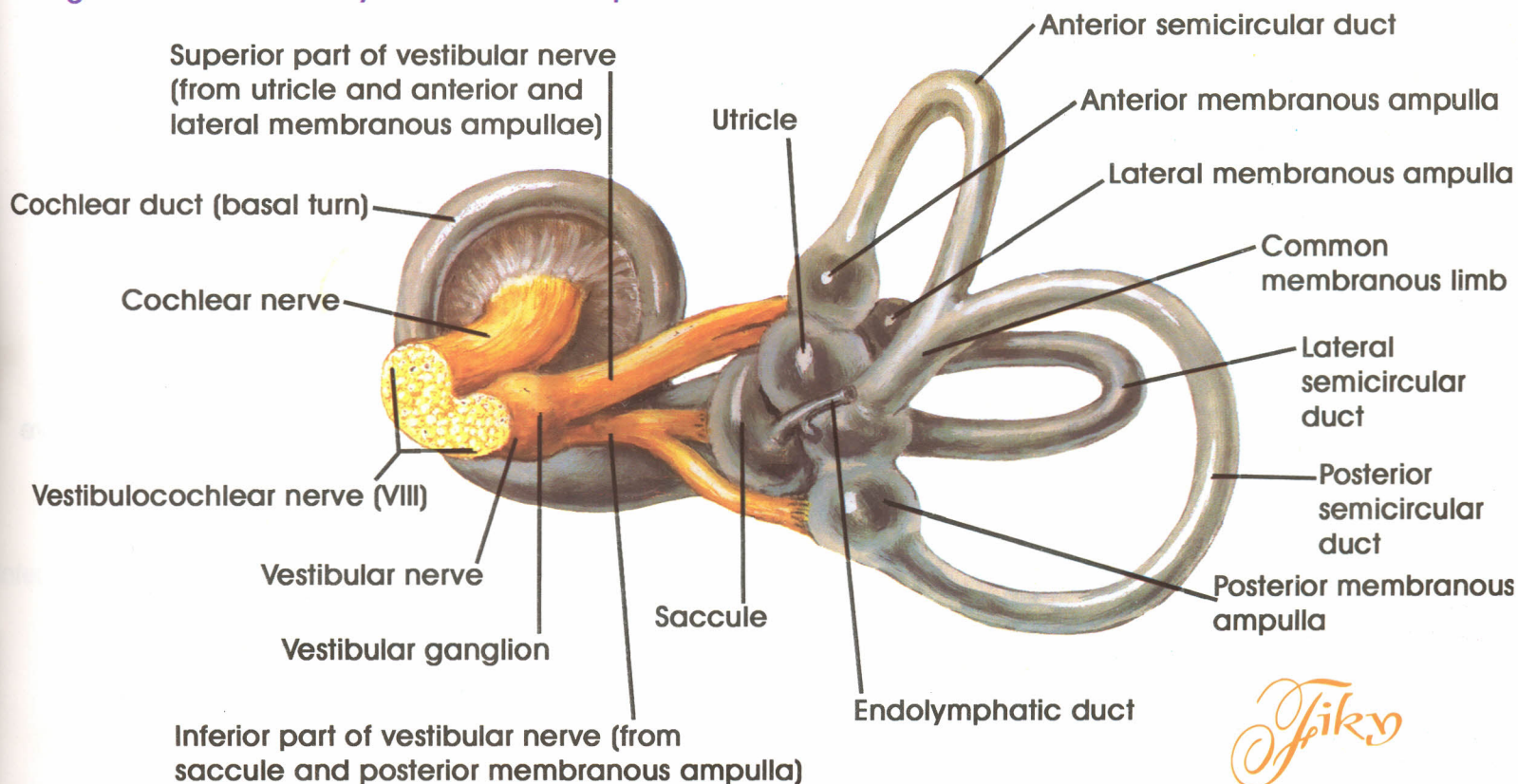
Right bony labyrinth (otic capsule), anterolateral view: surrounding cancellous bone removed



Dissected right bony labyrinth (otic capsule): membranous labyrinth removed



Right membranous labyrinth with nerves: posteromedial view



Spiky

Bony and Membranous Labyrinths

Superior palpebral conjunctiva:

tarsal (meibomian) glands
shining through

Seen through
cornea

Pupil
iris

Corneoscleral junction
(corneal limbus)

Bulbar conjunctiva
over sclera

Inferior conjunctival fornix

Superior lacrimal papilla and punctum

Plica semilunaris

Lacrimal caruncle in
lacrimal lake (lacus lacrimalis)

Inferior lacrimal papilla and punctum

Inferior palpebral conjunctiva:

tarsal glands shining through

Levator palpebrae superioris muscle

Orbital septum

Superior tarsal (Muller's) muscle (smooth)

Superior conjunctival fornix

Orbicularis oculi muscle (palpebral part)

Superior tarsus

Tarsal (meibomian) glands

Sebaceous glands

Eyelashes (cilia)

Openings of tarsal glands

Inferior tarsus

Orbicularis oculi muscle (palpebral part)

Inferior conjunctival fornix

Orbital septum

Sclera

Bulbar conjunctiva

Palpebral conjunctiva

Cornea

Lens

Anterior chamber

Iris

Posterior chamber

Spiky

Frontal bone

Insertion of levator palpebrae
superioris muscle

Orbital septum

Superior tarsus

Lateral palpebral ligament
and overlying raphe

Inferior tarsus

Orbital septum

Zygomatic bone

Supraorbital artery and nerve

Supratrochlear artery and nerve

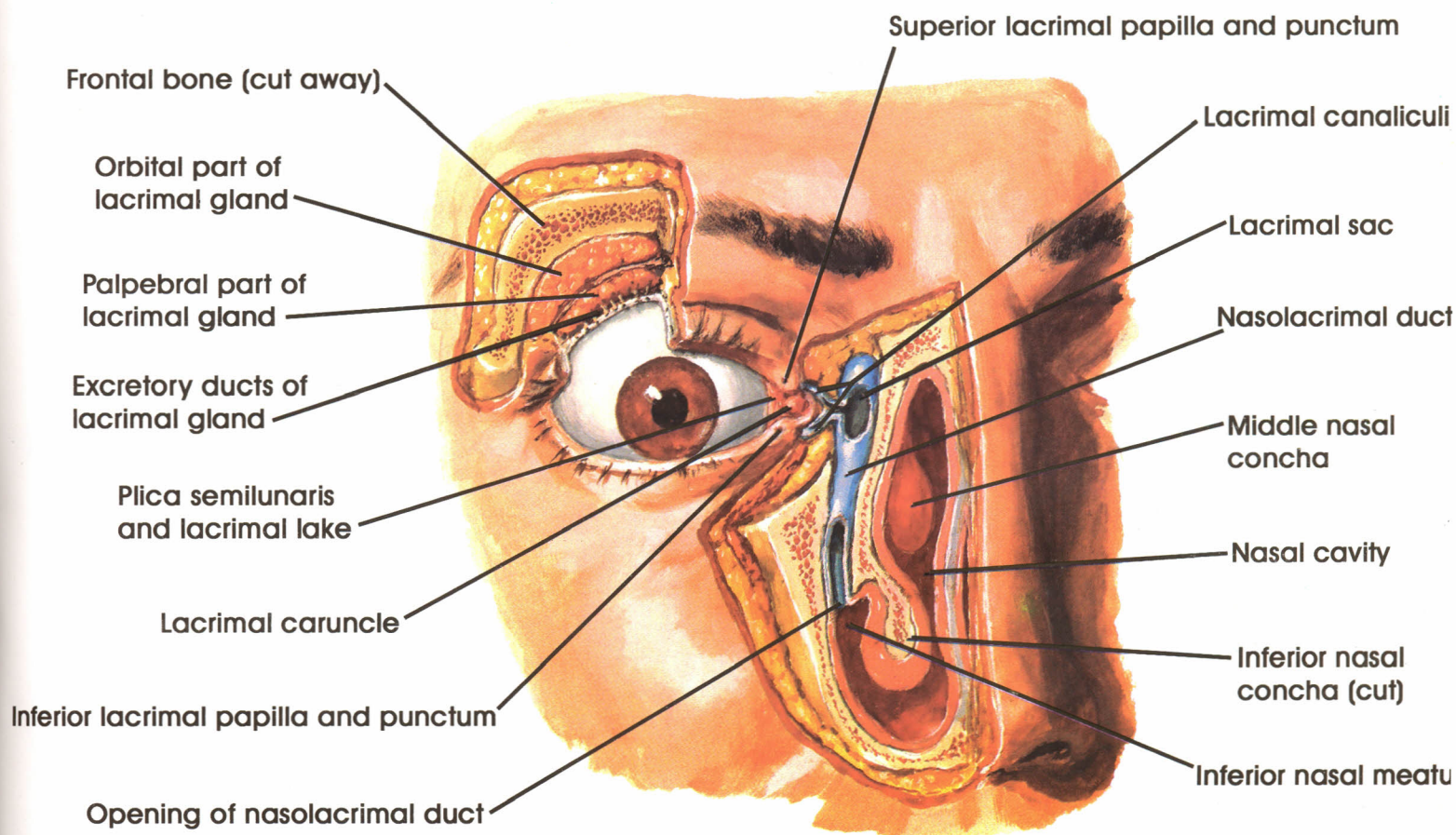
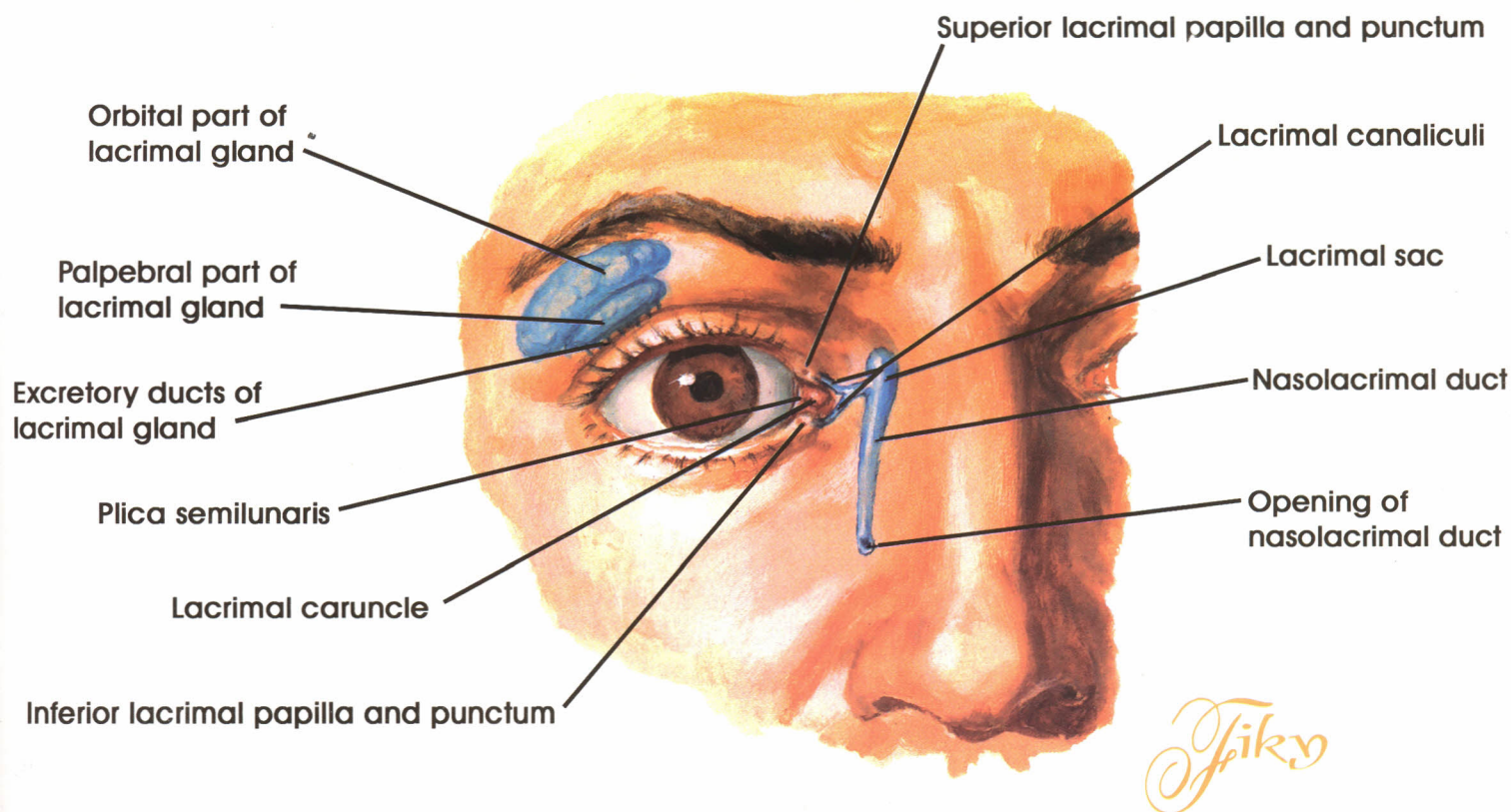
Dorsal nasal artery
and infratrochlear nerve

Lacrimal sac

Medial palpebral ligament

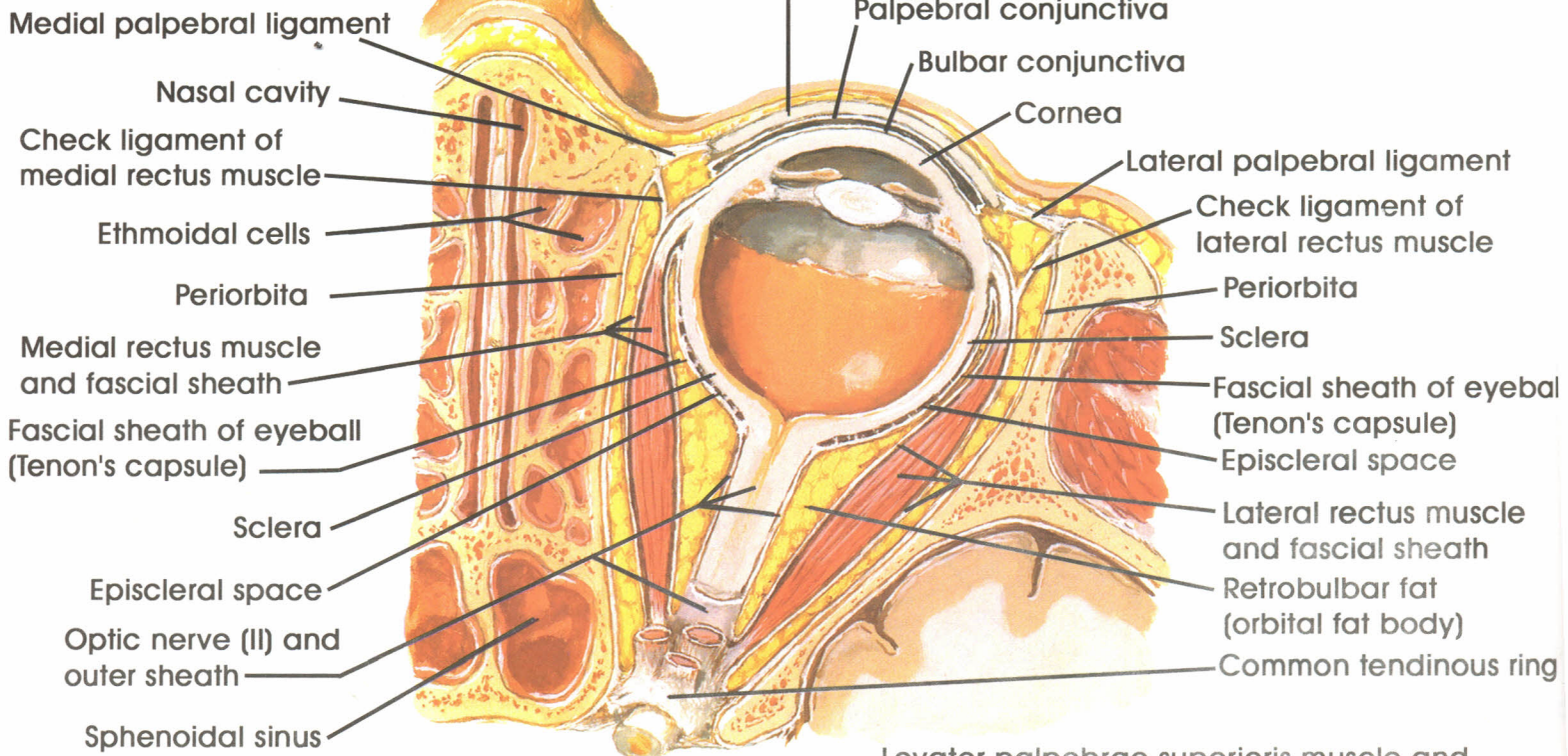
Maxilla (frontal process)

Infraorbital artery and nerve

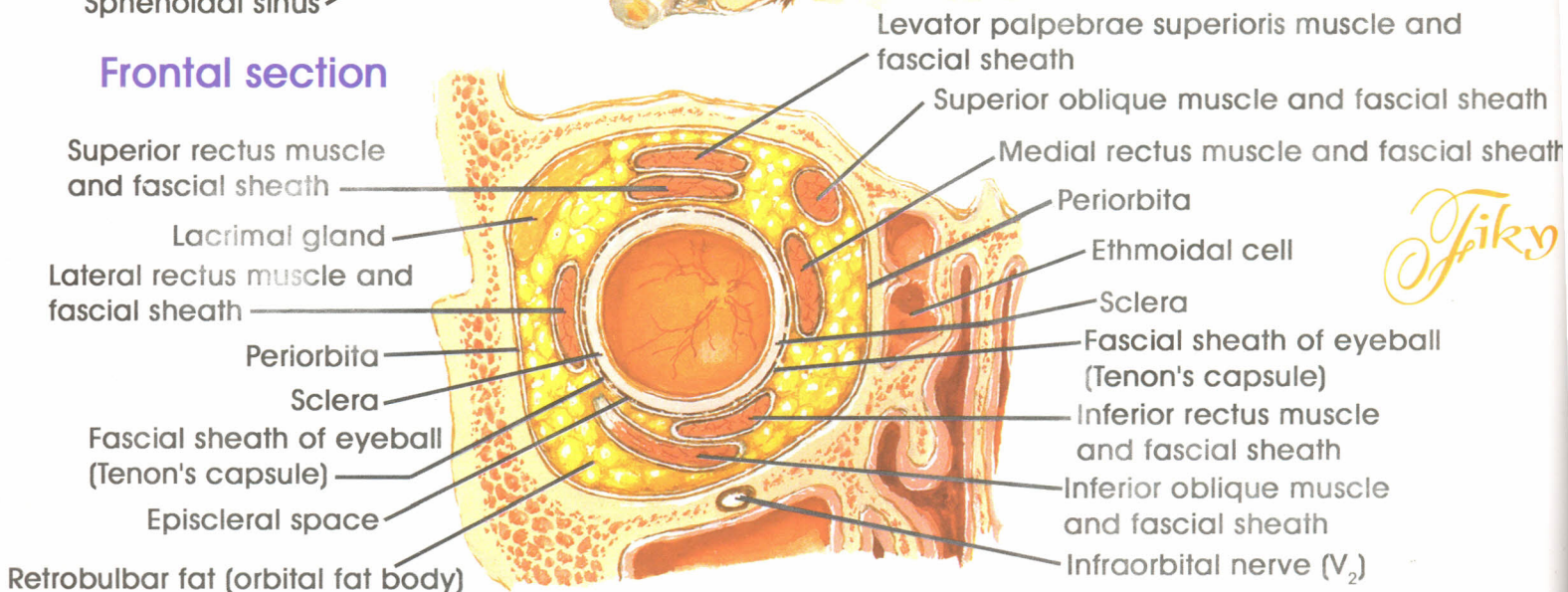


Lacrimal Apparatus

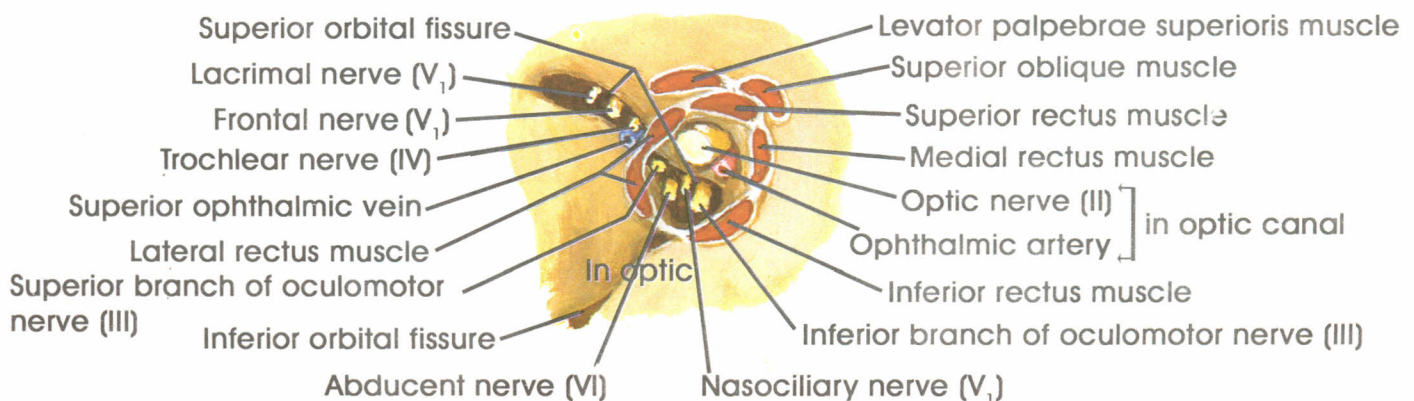
Horizontal section



Frontal section

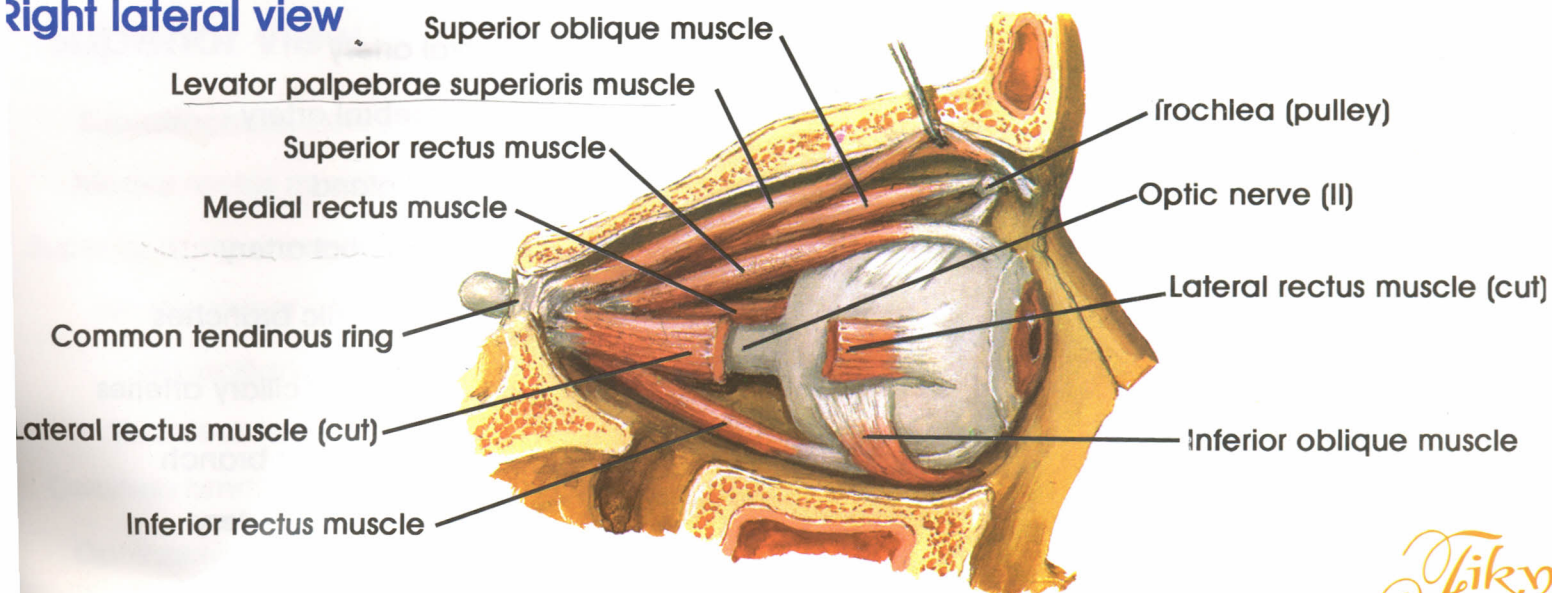


Muscle attachments, Nerves and Vessels entering Orbit



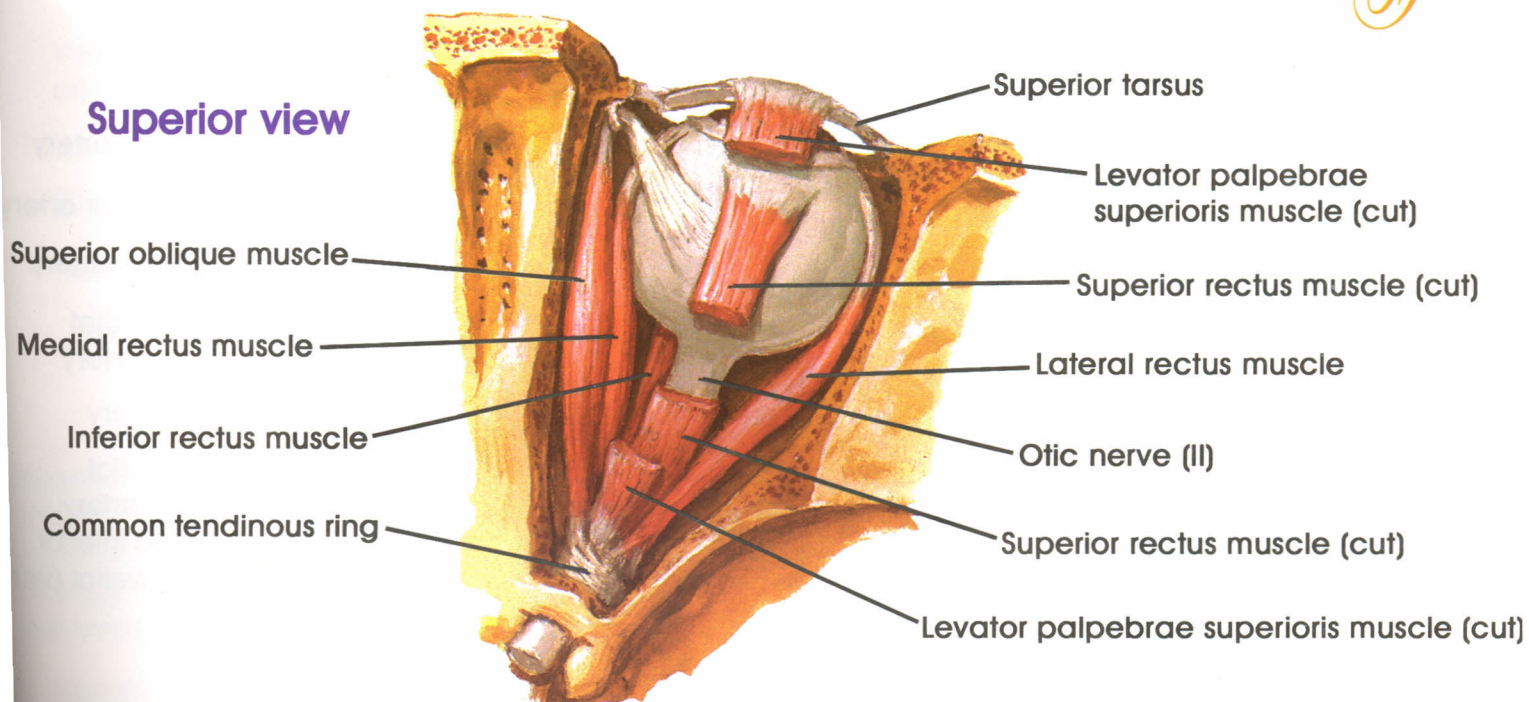
Fascia of Orbit and Eyeball

Right lateral view

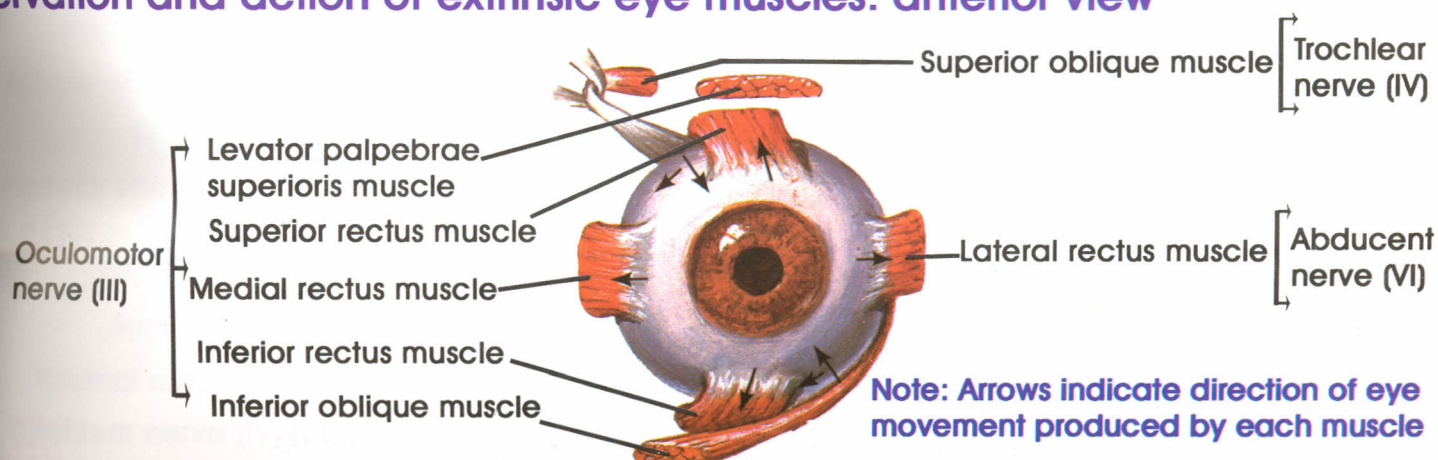


Fiky

Superior view

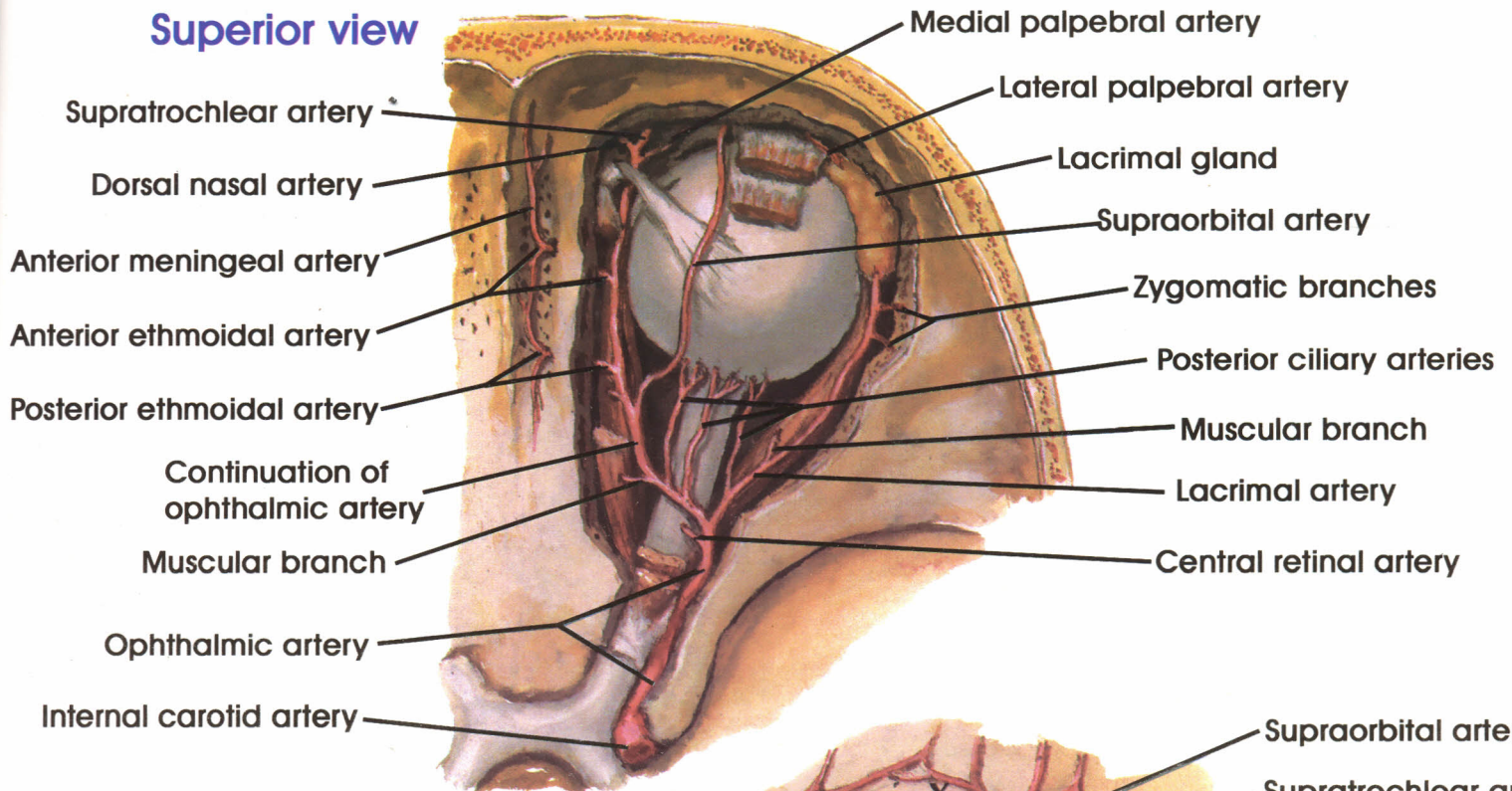


Innervation and action of extrinsic eye muscles: anterior view

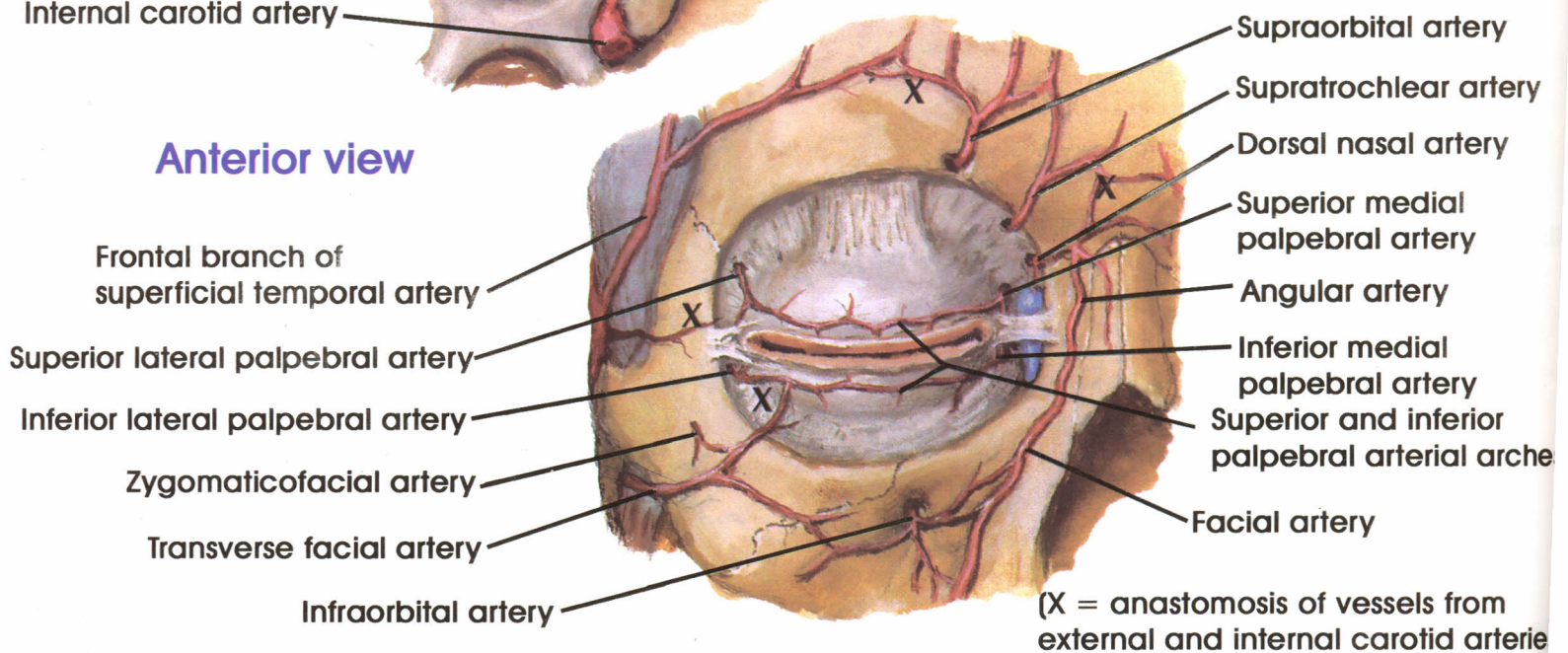


Extrinsic Eye Muscles

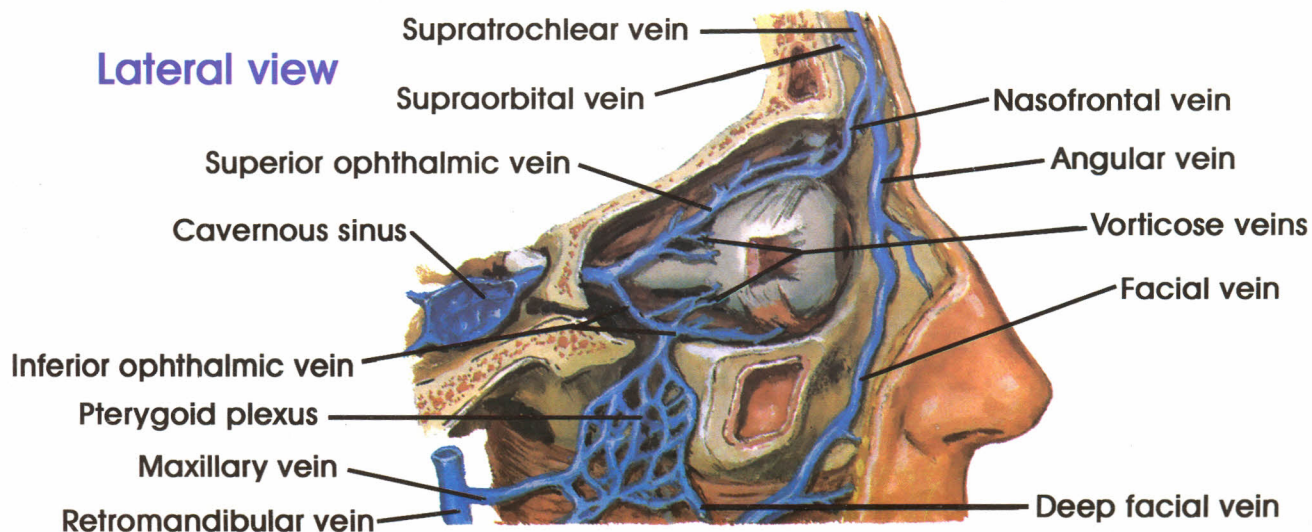
Superior view



Anterior view

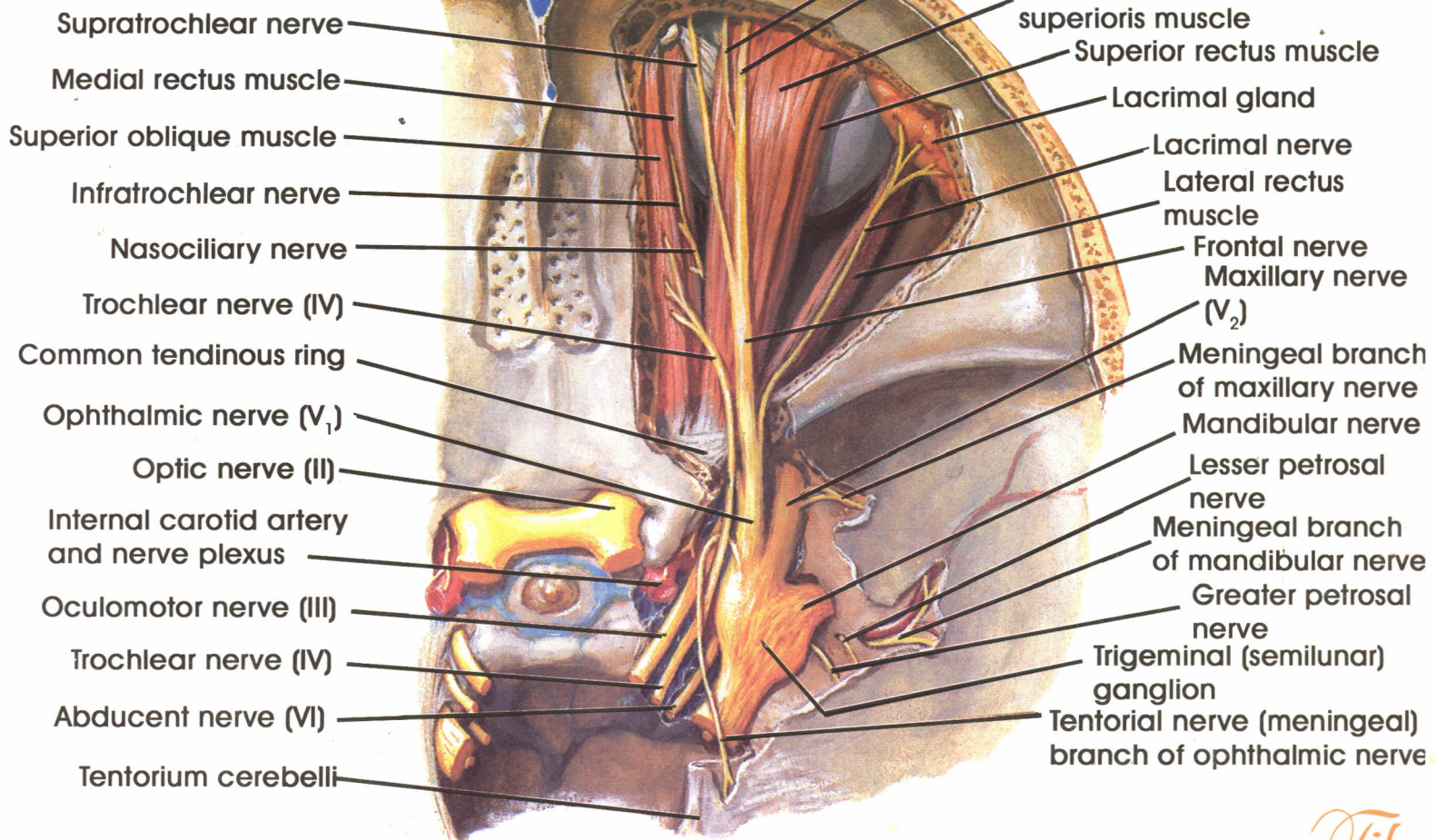


Lateral view



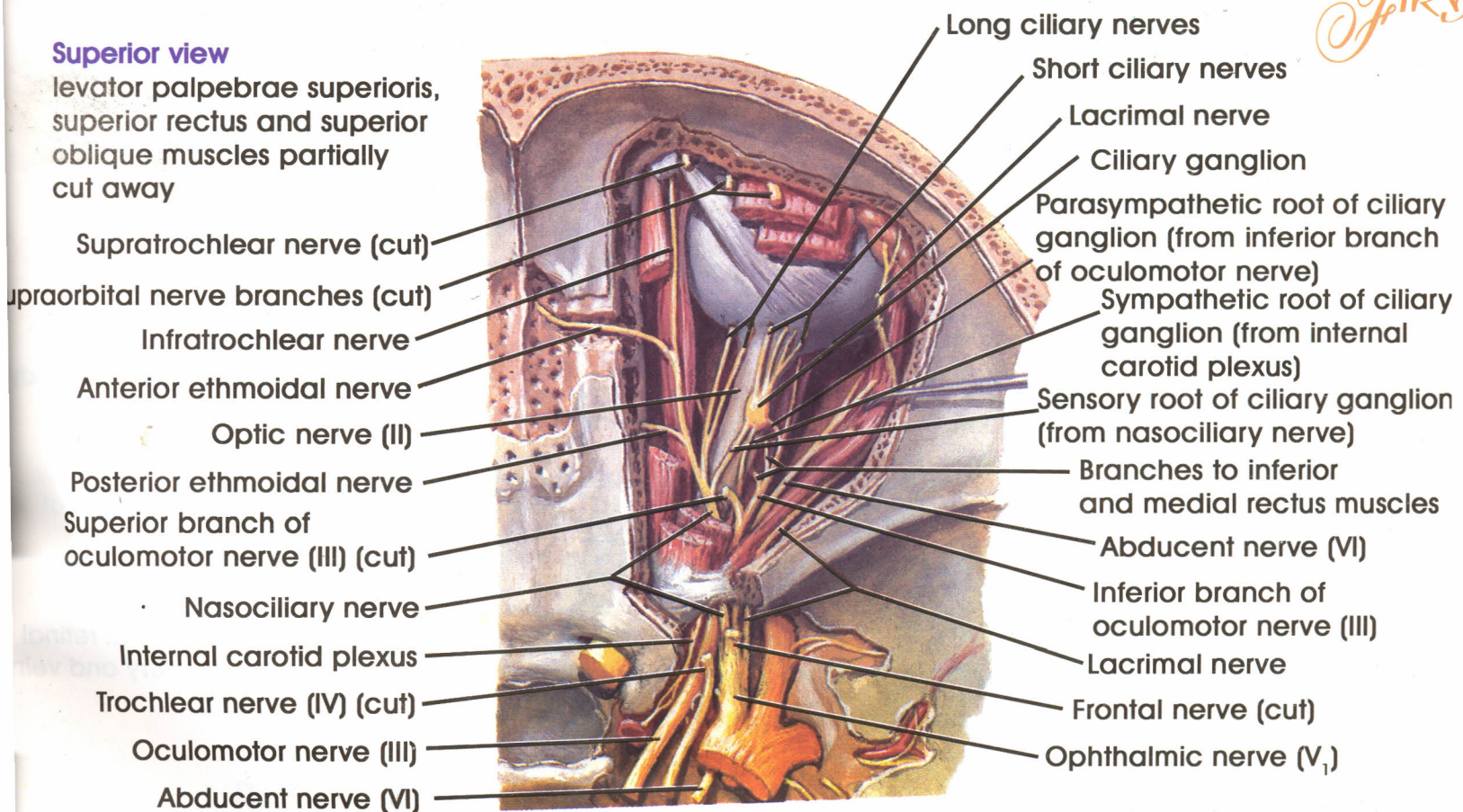
Arteries and Veins of Orbit and Eyelids

Superior view



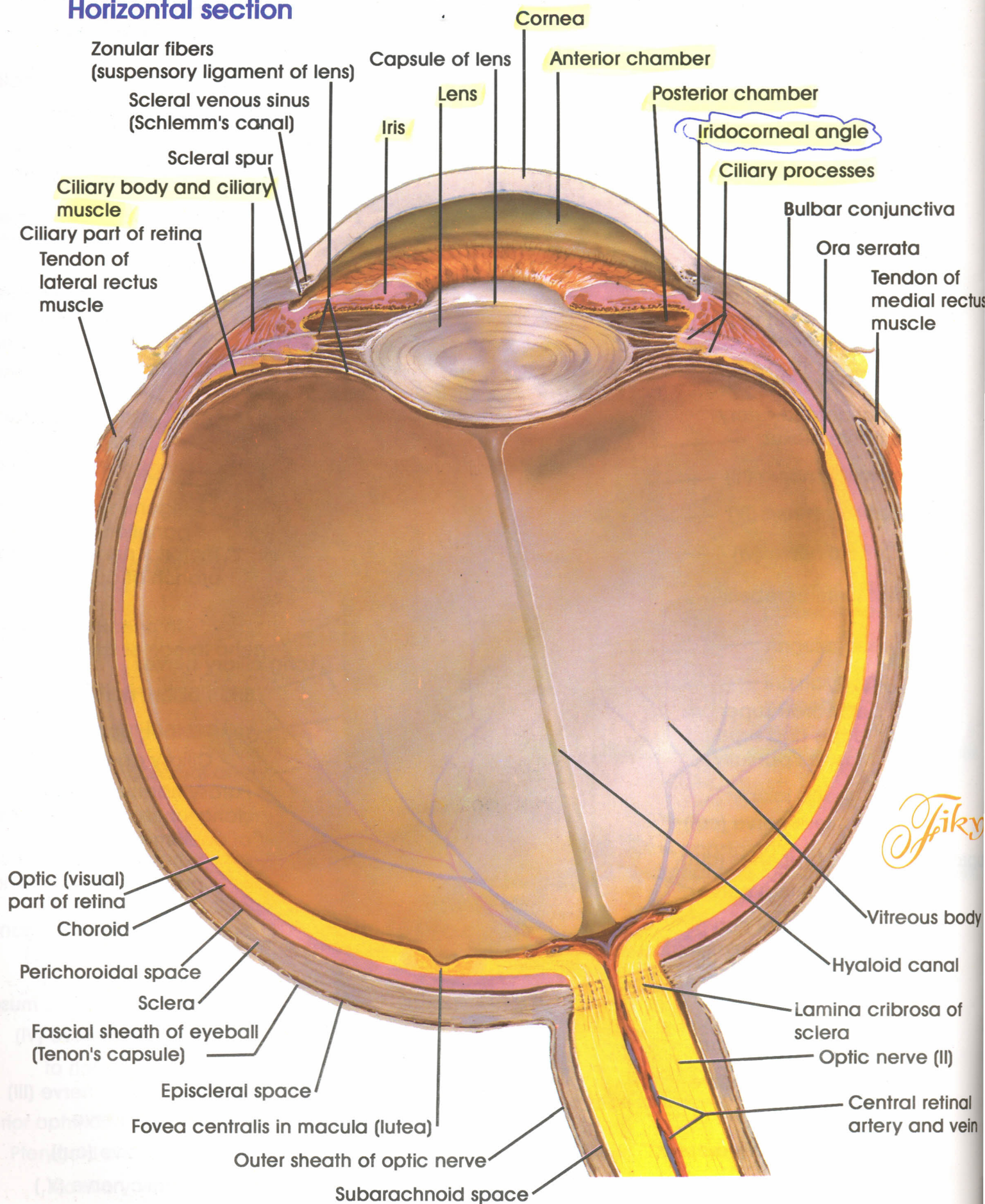
Superior view

levator palpebrae superioris, superior rectus and superior oblique muscles partially cut away

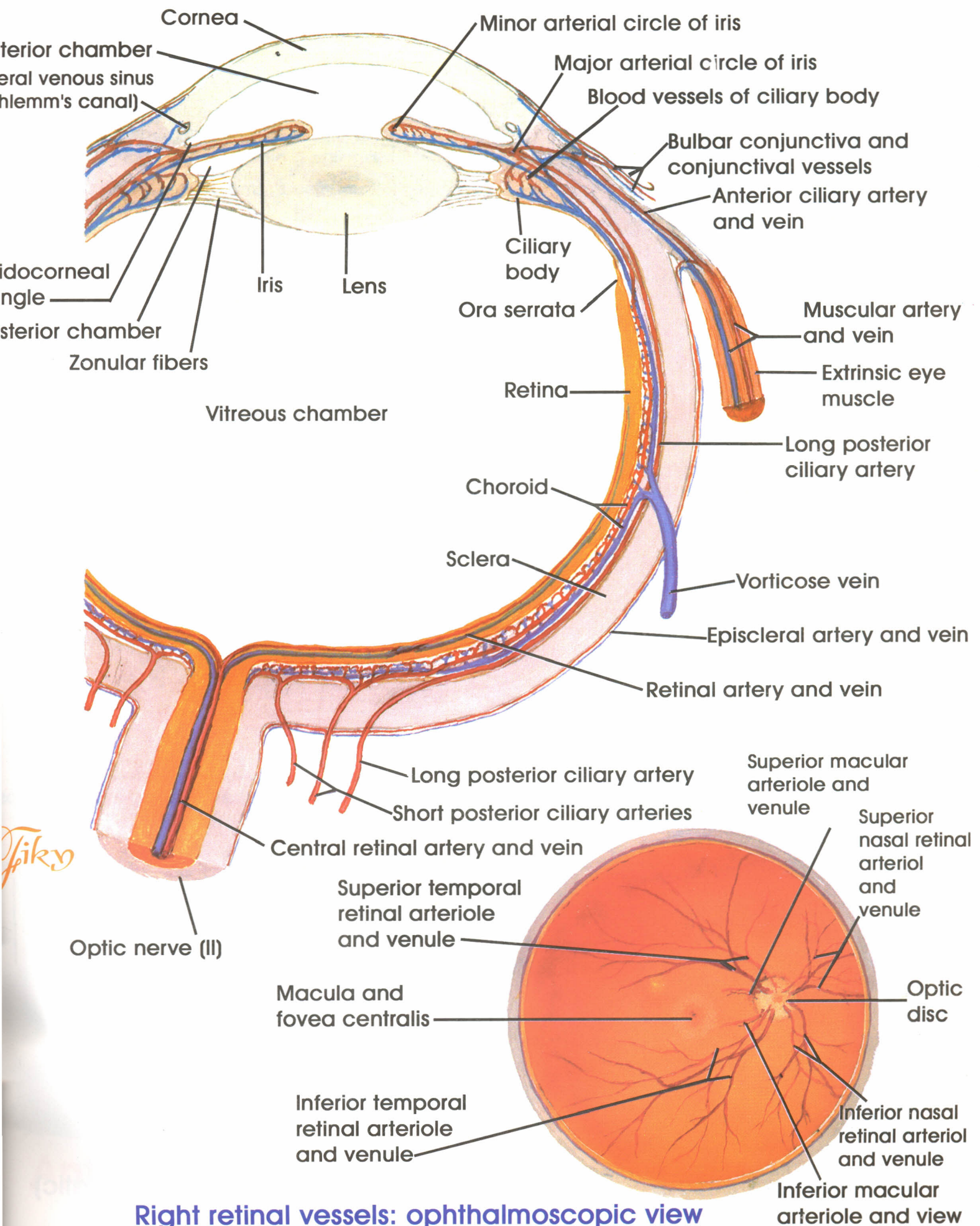


Nerves of Orbit

Horizontal section

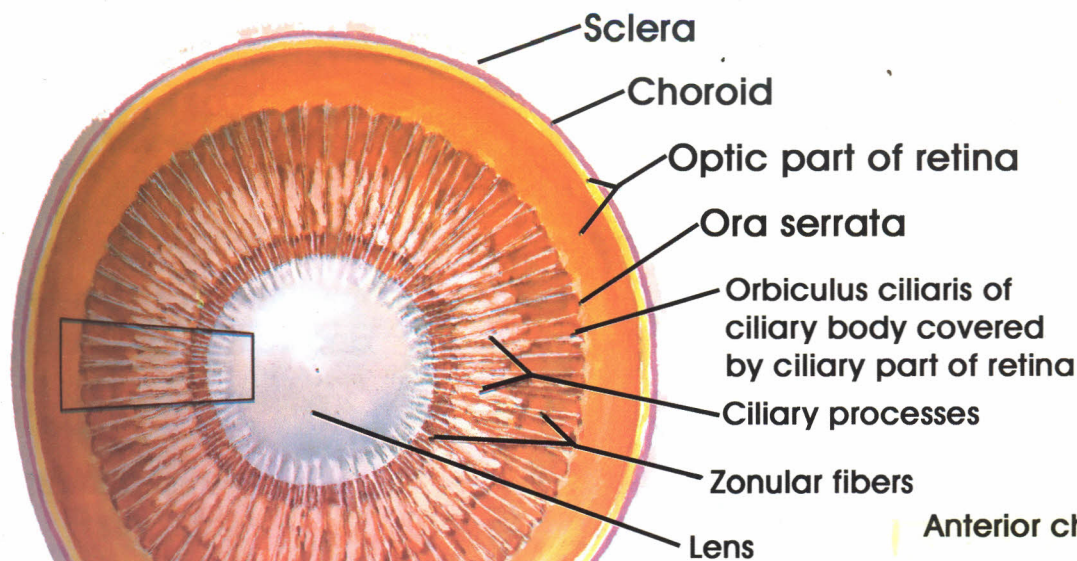


Eye ball

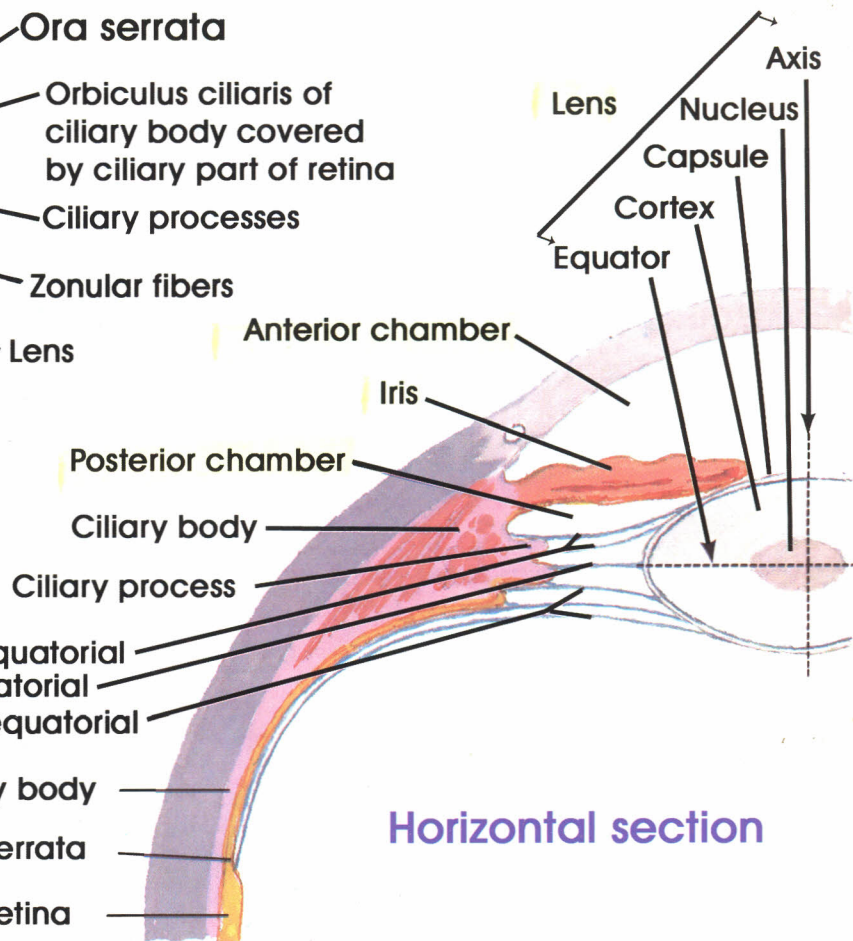


Right retinal vessels: ophthalmoscopic view

Intrinsic Arteries and Veins of Eye

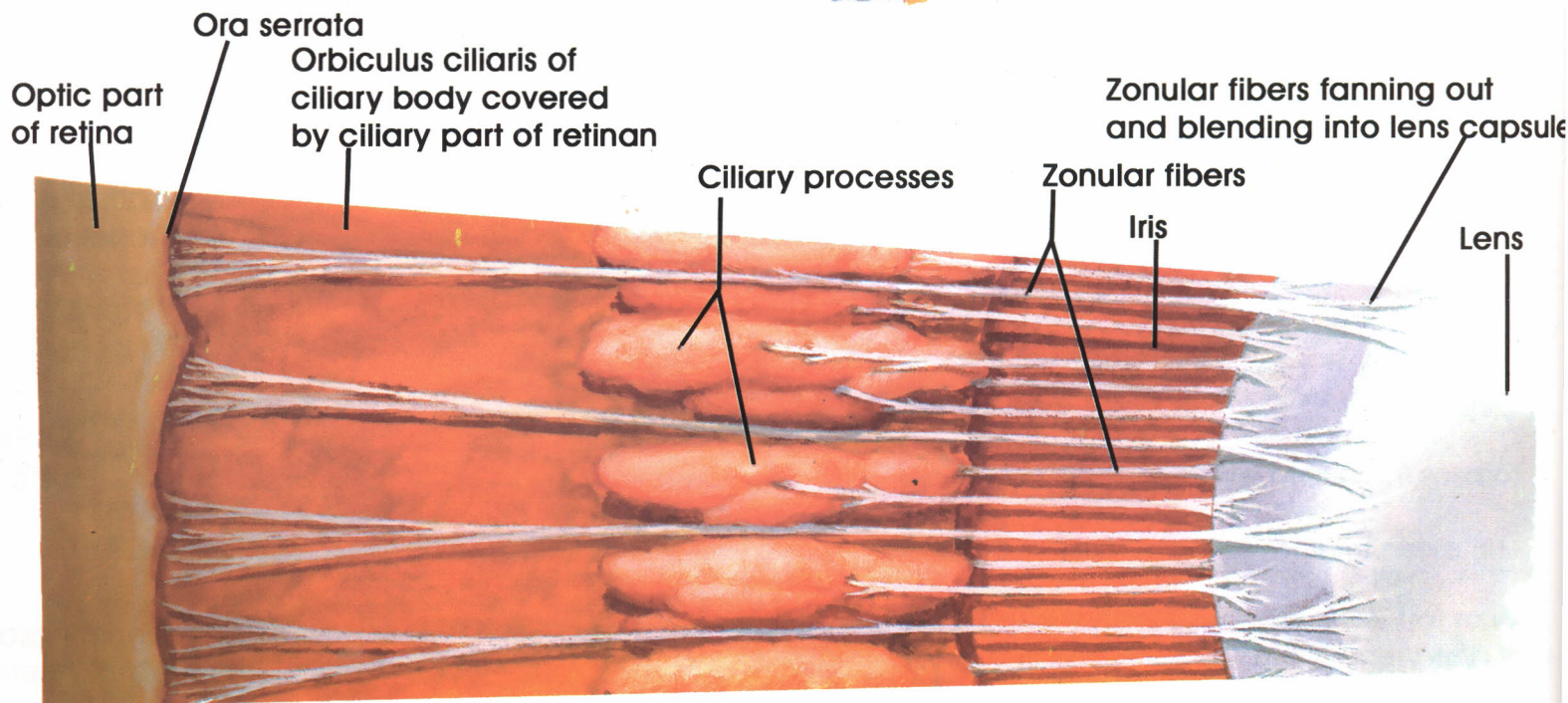


Eyeball sectioned in frontal plane:
anterior segment viewed from behind



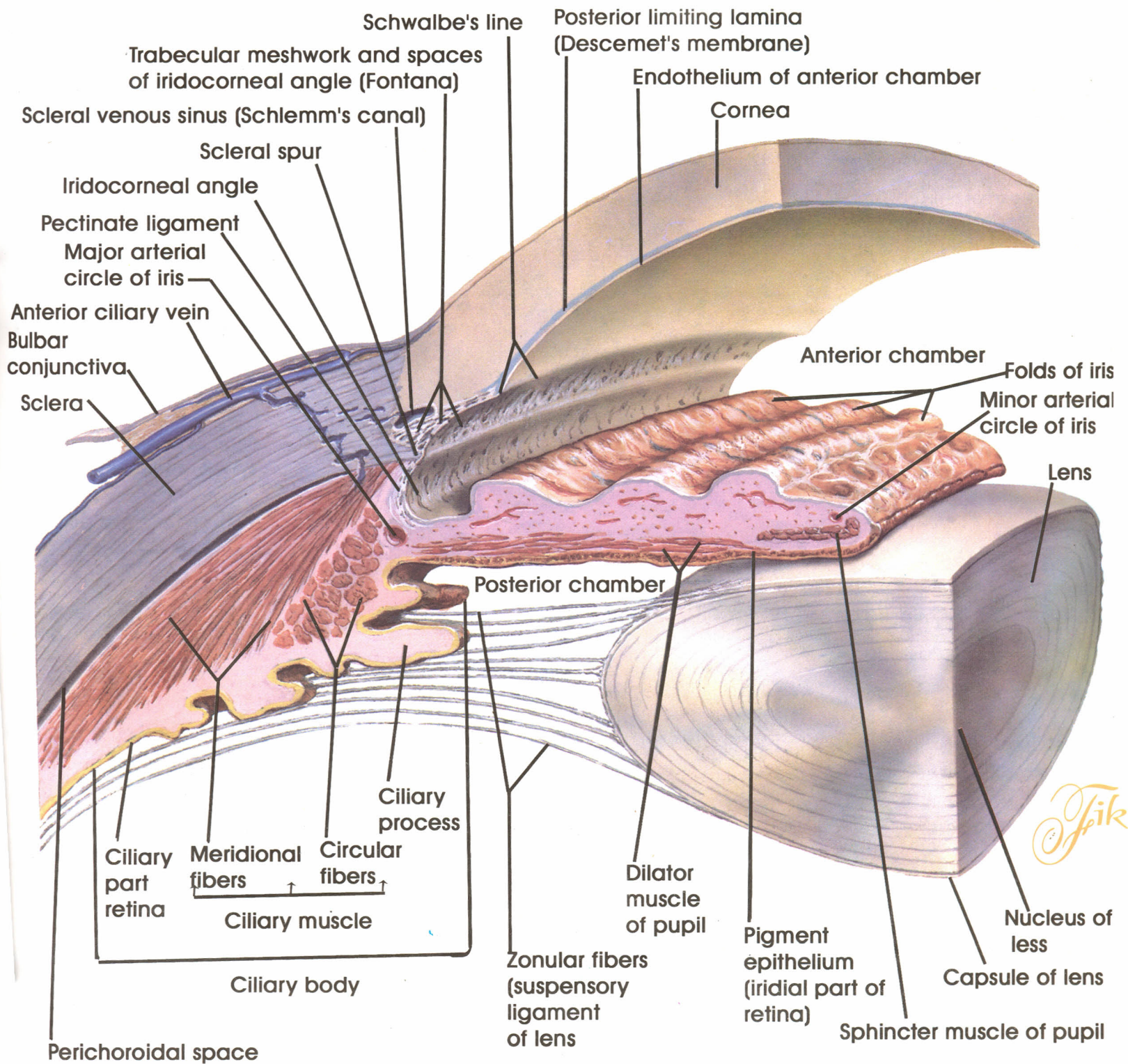
Horizontal section

Fiky



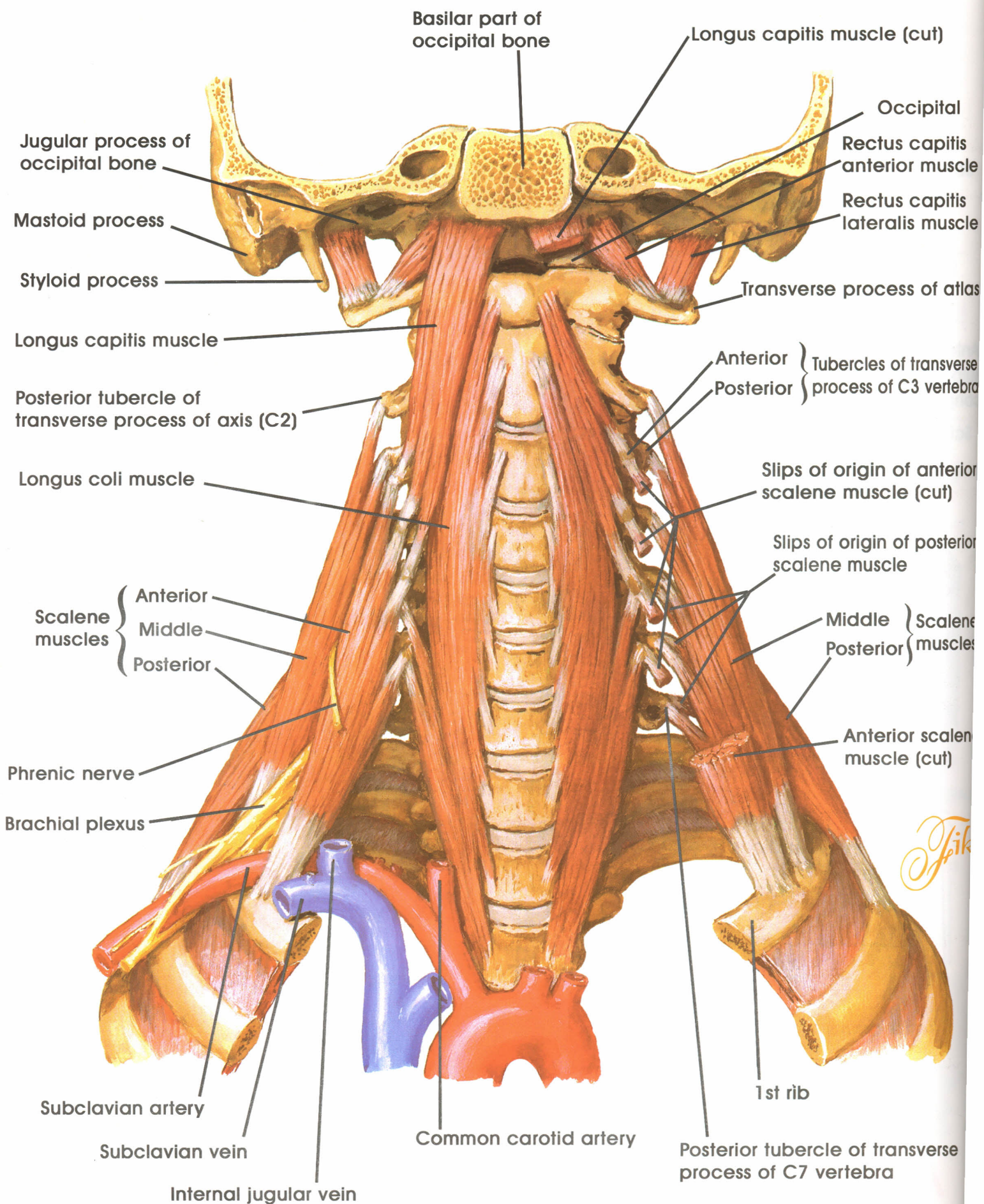
Enlargement of segment outlined in top illustration (semischematic)

Lens and Supporting Structures

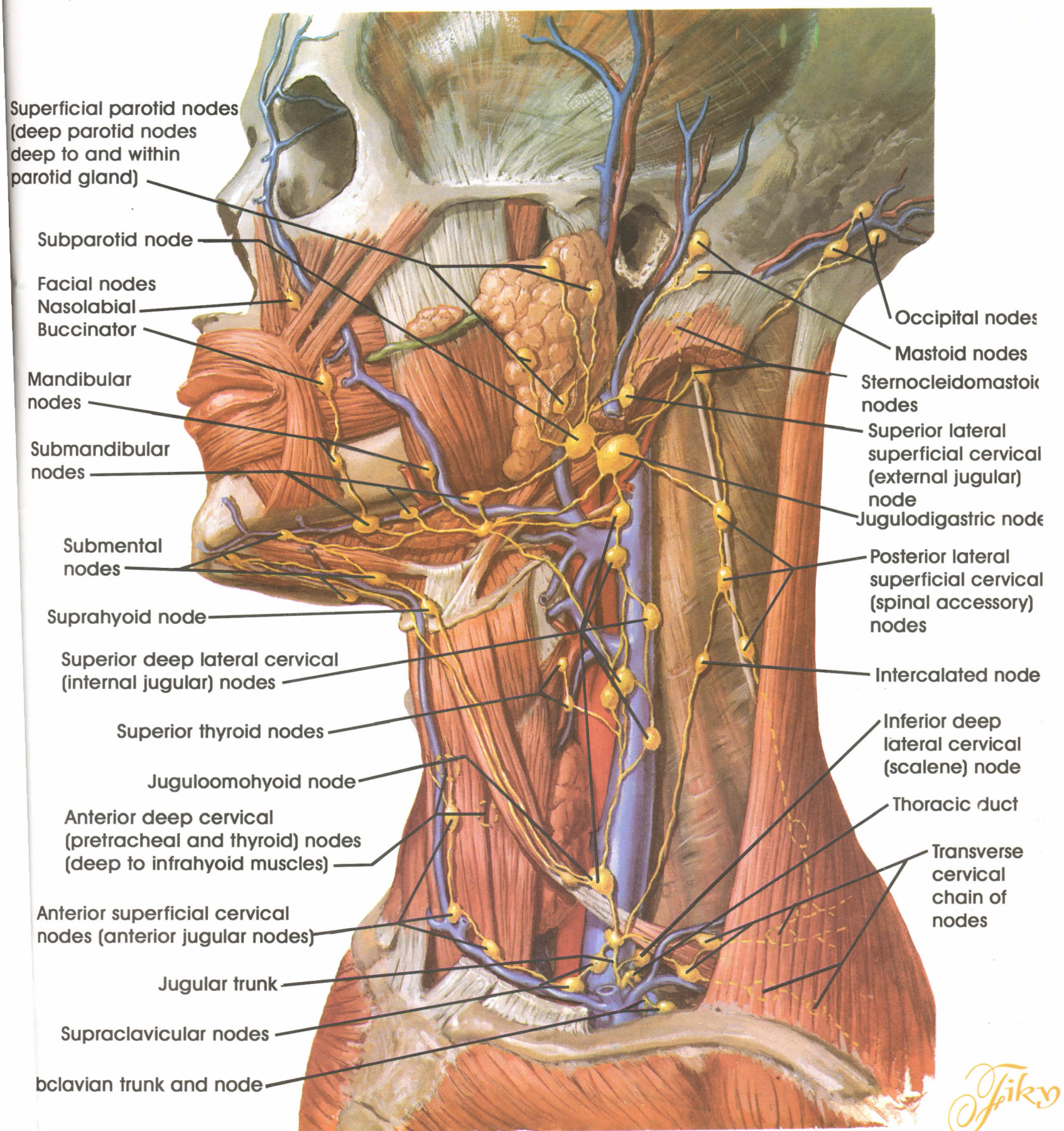


Note: For clarity, only single plane of zonular fibers shown; actually, fibers surround entire circumference of lens

Anterior and Posterior Chambers of Eye

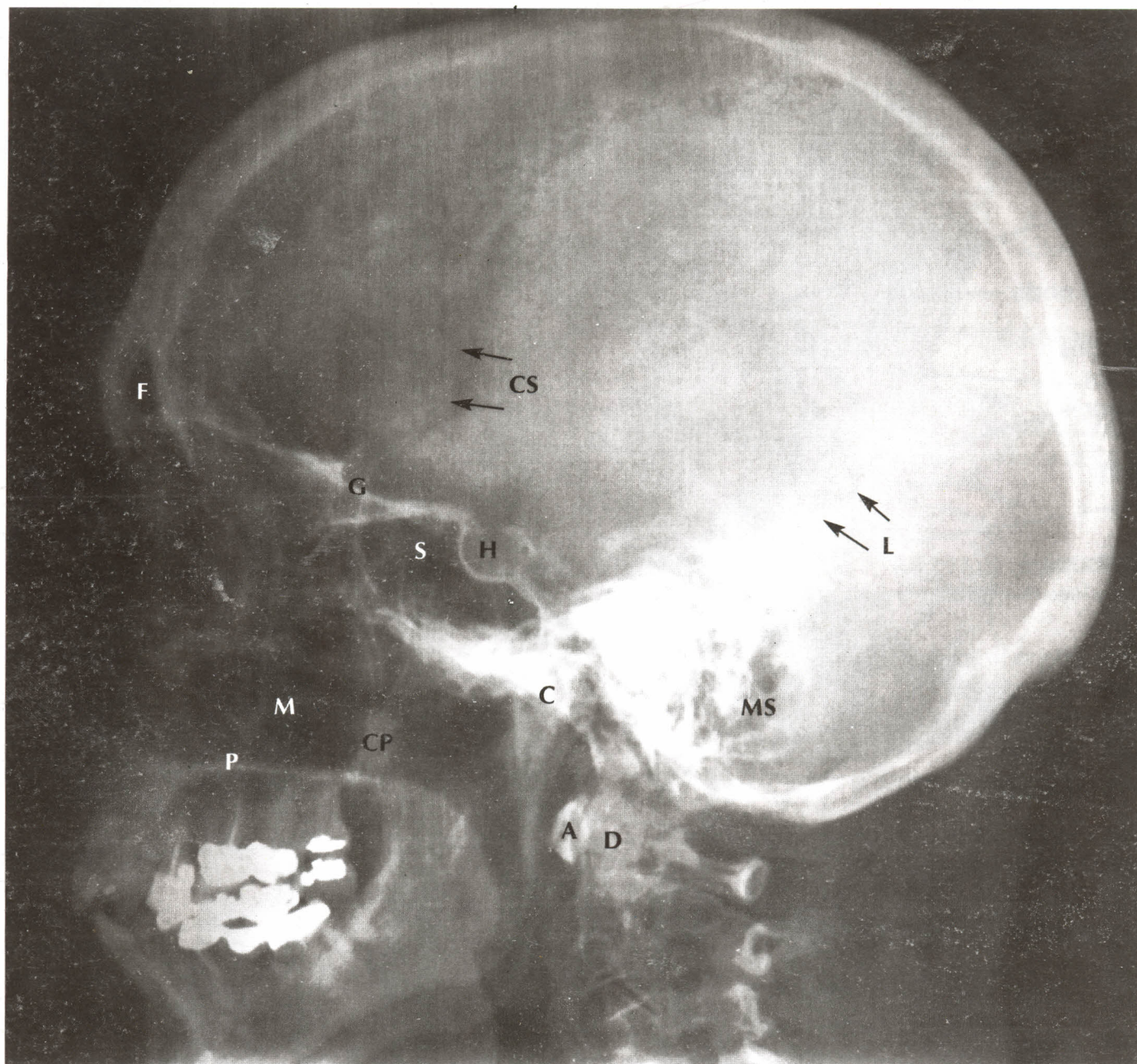


Scalene and Prevertebral Muscle



El-Fiky

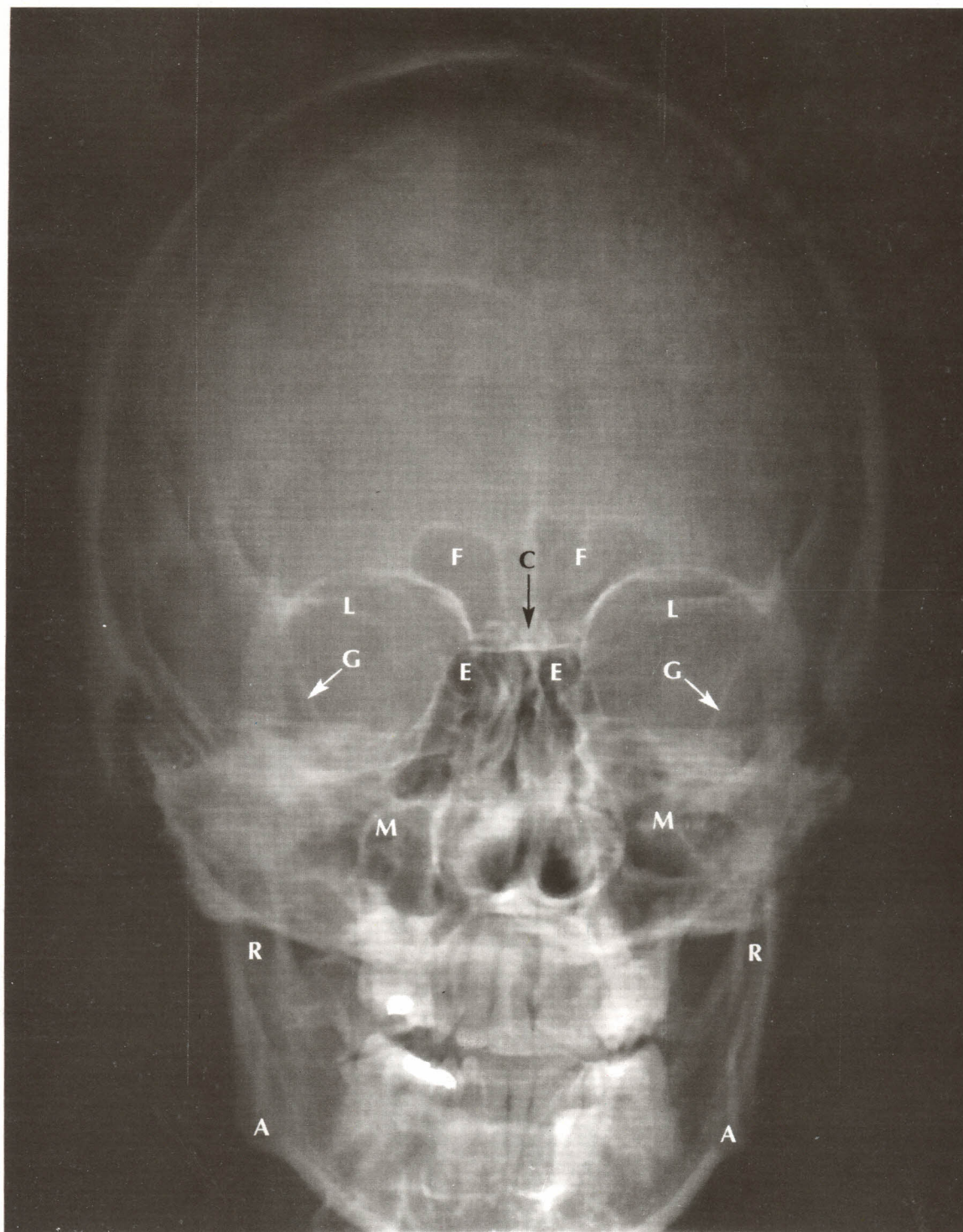
Lymph Vessels and Nodes of Head and Neck



- | | |
|--|-------------------------------|
| A Anterior arch of atlas (C1 vertebra) | G Greater wing of sphenoid |
| C Condyle of mandible | H Hypophyseal fossa |
| CP Coronoid process of mandible | L Lambdoid suture |
| C5 Coronal suture | M Maxillary sinus |
| D Dens of axis (C2 vertebra) | MS Mastoid air cells |
| F Frontal sinus | P Palatine process of maxilla |
| | S Sphenoid sinus |

Elfiky

Skull - Lateral Radiograph



A Angle of mandible

C Crista galli

E Ethmoid sinus

F Frontal sinus

G Greater wing of sphenoid

L Lesser wing of sphenoid

M Maxillary sinus

R Ramus of mandible

Dikey

Skull - Anteroposterior Radiograph